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ABSTRACT

Part 1 of the second volume in a four volume collection, this document includes sections on housing, health, crime, and energy and focuses on such topics as: federal policies for low income housing; the future supply of housing; nonaffluent behavior and attitudes related to health and well being; costs, coverage, and issues in medicaid; the neighborhood health center; crime and poverty; the rising cost of energy; and the effects of the energy crisis on the poor. (Author/AM)

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Collected Papers on Poverty Issues

DORIS YOKELSON, editor

Volume II:

Aspects of Low Income in America

Part 1

chapters by
ESTHER ADAM
FRANK E. ARMBRUSTER
BASIL J. CANDELA
JOHN J. LUCAS JR.
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HI-2277-RR

June 1975

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COLLECTED PAPERS ON POVERTY ISSUES

Edited by
Doris Yokelson

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PART 1

Chapters by

Esther Adam
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PREFACE TO COLLECTED PAPERS ON POVERTY ISSUES

Collected here, in four volumes, are numerous drafts, papers and reports that were written during the two years from June 1973 to June 1975 by the professional staff and consultants of the Hudson Institute working under a grant from the Office of Economic Opportunity. At the time the papers were written, the idea of putting together this anthology had not yet been born; nor were the authors writing with any particular attempt to relate each paper to the other by any consistent point of view, outcome, or style of writing. This approach is basic to the work of the Hudson Institute; and it was conceived to give rise to a freer and more creative expression of variations in thought about extremely complex issues. This collection retains this characteristic: no attempt was made to edit it into a tight uniformity or to change the individual approach.

Many of the papers are in the form in which they originally appeared as Hudson Institute drafts; others were revised, condensed, updated or extracted from longer reports. Some important subject areas, such as education, are not included in this anthology, as the reports are to be issued separately.

It is hoped that this collection will prove useful to anyone who is approaching the question of poverty either as a novice or as one who has grappled with its problems for many years. Volume I considers American poverty problems and policies of the past, present and future; the philosophical and historical perceptions of poverty, income and income redistribution; the measurement and reduction of poverty; and the workability of some income redistribution programs. Volume II views aspects of low income in America: chapters include the areas of income and employment, the work force, housing, health, crime, food stamps, energy and economic development programs. An examination of public attitudes toward poverty and the characteristics of the poor and near-poor makes up the entire Volume III. The sections of this volume cover both the extent and depth of the American public's support for domestic social welfare programs and the social, moral and economic attitudes of the poor and near-poor. The International volume, Volume IV, which contains chapter studies of poverty and social welfare programs in five West European countries, Canada and Japan, was conceived as an instrument for broadening our own perceptions, here at the Institute, of worldwide problems and solutions; and it is being passed on to you with the same intention. As with all the chapters in this collection, no solutions have been offered; but many problems have been raised, issues sorted out and elucidated, often in new ways, and recommendations suggested

Doris Yokelson

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HOUSING

"Federal Policies for Low-income Housing"

by

Ronald D. Westby

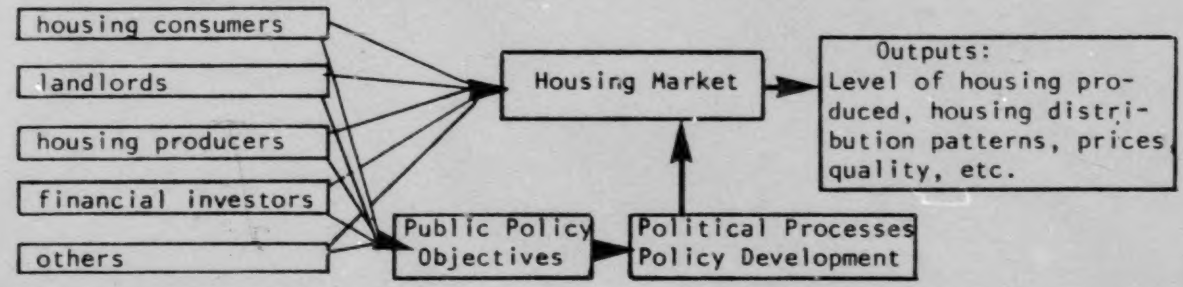
This chapter was originally issued as Chapter III in a Hudson Institute Research Report entitled Poverty and Housing, HI-2013-RR, dated June 24, 1974. It has been considerably revised in its present form.

FEDERAL POLICIES FOR LOW-INCOME HOUSING*

A. General Perspective on Housing Policies

The purpose of this section is to examine the effects of government policies intended to improve the availability of housing for low-income families. The approach taken here will be to observe the housing market impact of those government policies at least partially intended to aid low-income families with their housing problems. In the discussion that follows, the emphasis will be directed toward the macro-level effects of the policies under consideration, i.e., our primary concern will be to analyze policy influences on general housing market parameters and outputs rather than on individual actors in the market. The following diagram is useful for understanding this difference:

"A SIMPLIFIED HOUSING MARKET"


housing consumers
landlords
housing producers
financial investors
others
Housing Market
Outputs:
Level of housing produced, housing distribution patterns, prices, quality, etc.
Public Policy Objectives
Political Processes Policy Development

It is a commonly accepted social notion that every family, regardless of its financial or social situation, should have decent housing. However, there has been disagreement about the proper role of government in the process of reaching this goal. Arguments based on classic economic theory would suggest that the private market is the mechanism best-suited for making efficient resource allocations in society and, therefore, should be allowed to function with a minimum of government intervention. By efficiency in resource allocation, we mean that:

---

*This report is heavily indebted to statistical analyses and projections conducted B. Bruce-Briggs at an early stage of the project, and Mr. Bruce-Brigg's "Comments on the 1970 Housing Census" is included as Appendix A. Interpretations, conclusions, and recommendations are, however, those of Mr. Westby, who is therefore listed as sole author of the report.

1. the market is responsive to supply and demand by consumers,
2. products are offered for sale at prices that reflect costs,
3. the whole process takes place automatically with no central direction, and
4. one party cannot be made better off without hurting someone else (Pareto-optimality)

This argument concludes that government policy is not greatly required to get most housing built, and historically this has been the case. By and large, most of the changes which have occurred in the housing stock in America have been the result of private decisions and were carried out through the operation of the private marketplace. Public policy has been responsible for only a small portion of the trends in housing stock condition and shelter availability.

The principal factors influencing housing trends have been the value that Americans place in sound housing and the relatively high level of economic prosperity which has prevailed in recent years. Generally, Americans have settled ideas about what constitutes good housing and in particular they desire single family houses at rather low densities.* In the last generation, rapidly growing national income and constantly increasing personal incomes have permitted an upgrading of the nation's housing stock and a general improvement of housing at all income levels and in almost all areas of the nation. Up until quite recently, the private market was responsible for nearly 90 percent of all housing built annually in this country. Although this percentage has dropped somewhat lately, the private market is still by far the primary initiator and source of housing production.

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*Frank E. Armbruster and Doris Yokelson, "American Opinion on Urban Issues," (HI-1743-P), July 1973.

However, there are a number of factors which can lead to market inefficiencies and which form the crux of the arguments used by those advocating more government intervention in the way the housing market functions. Such inefficiencies or market failures are thought to result from the presence of:

1. externalities--non-market, unpriced effects such as the influence of the 'neighborhood effect' on housing values;
2. conditions of imperfect competition (monopoly or oligopoly), primarily on the supply side of the housing market;
3. inefficient government controls or government policies which conflict with or adversely affect housing policy goals;
4. macroeconomic unemployment; and
5. poor information.

Additionally, a highly skewed income distribution can make an otherwise "efficient" market allocation "unsatisfactory" according to desired social goals and criteria of social equity.

The advocacy for greater government involvement in the housing market is thus predicated on reducing the undesirable effects of the above unstabilizing factors. Government intervention is called for because inefficient or inequitable conditions are believed to be preventing satisfactory market operations.

Such arguments have only gained force fairly recently, though. Historically, the Federal Government has not been very interested in policies about housing per se, and especially not concerned about low-income housing. Programs which did affect housing in the country were justified in the Congress for their employment-generating effects, for their stimulating effects on a downturned economy, or to aid a specially favored group such as war veterans. Housing itself, though, was not seen as requiring the direct involvement of government. This perspective has been altered in recent years, and the Federal Government has begun to take a more activist role in housing, especially in assuming more responsibility in aiding lower-income families obtain suitable shelter. Regardless of the motivation for these various programs, they have been enacted into law and are requiring substantial commitments of resources for their promulgation.

Generally, the Government's housing policies can take two theoretical tacks: first, policies which are intended to influence the supply--the overall amount and quality--of housing available in the United States; and second, policies which are designed to stimulate or support adequate levels of demand for housing by easing the financial obstacles which might otherwise stand in the way of home ownership or apartment acquisition. In the following pages, we will briefly examine the results of major housing programs which have been oriented, at least partially, toward low-income families and their housing problems. (It should be emphasized here that most housing legislation passed in this country has been intended to ease the housing situations of moderate- and upper-income families.) This presentation will be organized around a supply-side, demand-side dichotomy in looking at the effects of the various policies.

B. Supply-side Emphasis

Government strategies seeking to upgrade the quantity and quality of housing can be viewed as lying along a passive-active continuum of market involvement. By this we mean that government activity can be directed toward facilitating the general operation of the market, although without direct intervention (the passive approach), or it can involve more direct government participation in the market to augment the supply that the private market may not have provided. This distinction becomes important when considering what may be necessary to deal with problems faced by low-income families in locating suitable shelter. Almost by definition, this group is outside the normal operation of an economic market. Therefore, a preliminary judgment can be offered that a 'passive' strategy directed toward housing supply may not appreciably help the low-income family.

1. 'Passive'

The Federal Government has sought to encourage the adoption of middle class standards for housing as a way to standardize and upgrade the quality of housing in this country to a fairly high level. The principal method which has been used for imposing these standards is the use of local zoning, building, and housing codes. The Federal Government has sought to promote the adoption of these codes by offering various encouragements and financial inducements to local municipalities and builders to do so. For example, the Federal Housing Administration has required fairly reasonable but strict standards in housing that it approves for mortgage insurance; and the U.S. Department of Housing and Urban Development, through disbursement of monies under Section 701 of the Federal Housing Act of 1954, has been encouraging the development of local zoning ordinances and subdivision regulations. Doubtless, these stimuli have accelerated the adoption of these standards, but it is almost certain that most of them would have been adopted in any event.

However, this process has by no means been complete. Many rural areas do not have any regulations on local building. Most areas of the country do not have housing codes. Additionally, in many places, there are codes on the books which are poorly enforced or ignored. However, the spread of urban standards into rural areas and the increasing interest of state government in these matters will certainly lead to an expansion in coverage of such codes in the future.

Such an expansion of the codes is not an unmixed blessing. Although we know of no hard evidence on the subject, personal experience with suburban and rural zoning and subdivision ordinances has been that these have had the effect of increasing housing costs, particularly for lower-income groups. A significant example of how zoning hurts the poor is through the control and/or prohibition of mobile homes. Additionally, local autonomy in the use of zoning ordinances has frequently led to situations where the poor--and particularly the black poor--are prevented from living in large sections of metropolitan areas. Therefore, attempting to reach a high level of housing quality through the application of zoning ordinances and the various housing and building codes may be satisfactory for those who can acquire the necessary information and meet the financial requirements of the marketplace, but it has had a number of negative implications for those families which lack the means to compete.

A second 'strategy' which we would place in the category of a passive supply-side approach is that associated with the process of 'trickle-down.' There seems to be an implicit philosophy behind a good deal of the housing legislation enacted by the Congress that by aiding the more wealthy segments of the population, the bulk of the poor would indirectly benefit as well. (Although probably the prime reason for such legislation is simply to facilitate home-ownership as a perceived social good.) Therefore, an understanding of this 'trickle-down' process is important to properly analyze the significance of much 'housing' legislation.

Trickle-down

Most of the housing supplied to lower-income groups, indeed most of the housing supplied to everybody in America, is made available through "trickle-down." Only one out of six American families live in new homes; everybody else lives in used homes. Except for recently constructed neighborhoods, most communities and houses are not occupied by members of the social class for whom they were originally built. Observation of our cities indicates that trickle-down does work (except at the very bottom*). However, the trickle-down process is, in our opinion, somewhat imperfectly understood. Actually, it has to be understood in combination with several other phenomena which are going on simultaneously--urban growth, the general upward mobility of the entire society, the upward (and downward) mobility of individual groups and families within the society, new construction, and the abandonment and deterioration of the oldest and worst housing. We display the following paradigm to assist in understanding how these phenomena interrelate. (See charts and illustration on pages 80-82).

The paradigm assumes a growing metropolitan city which doubles in population at the same time that prosperity, as measured by the median family income of its residents, also doubles. As in the real world, the newly constructed housing has been occupied by the upper class and the upwardly mobile members of the middle class, as indicated by the solid-line boxes. Since we ignore downward mobility, everybody is assumed to upgrade their income level, but some, of course, do so faster than others. Housing for various groups is shown in the dotted lines and here the differences are quite striking. The middle class housing in Year I becomes occupied by the lower class. And in Year II the old lower-class housing has been destroyed. Note that the paradigm has been constructed in such a way that the new lower class has occupied all of the housing formerly occupied by the middle class. The new lower class remains the lower-income group but now occupies what was formerly the middle-income housing (B) yet its price has remained the same--$10,000. This former middle-class housing has trickled down, yet its value may even have gone up, if we add a bit of inflation. Also, although the former middle-class housing is now II - I years older, it is still much better than the former housing that the lower class had. However, it is now lower-class housing; and if lower class housing is bad by reflective perception or any other criteria, the amount of lower-class housing has doubled. Similarly, the former upper-class housing units (C) have trickled down to the middle class, yet also have retained their absolute value.

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*J. Lansing, New Homes and Poor People (U. of Michigan Social Research Center. 1968). Lansing's data finds the trickle-down hypothesis valid, but does find sharp dislocations in transfers from white to black, reflecting the commonly known dual housing market.

Adding a few variants to the paradigm can explain some other things that are happening in our metropolitan cities. The older lower-class housing is not entirely liquidated, but some remains for the very bottom group of the lower class which, of course, is heavily represented by recent in-migrants from rural areas. Furthermore, the old upper-class housing is not all transferred to the middle class. Some of it is very desireable on account of its location or reputation, so it remains upper-class housing, but its price increases to the new upper-class level (in this case $40,000). This perhaps explains why so many prosperous people, including most commentators on urban affairs, have the impression that housing costs are increasing at a staggering rate. In fact, in the real world variations are nearly infinite. Each neighborhood is continually changing. On the average, 20 percent of Americans move every year. Many relocate in the same neighborhood; others move out. Individual families are upwardly and downwardly mobile. Fashions in neighborhoods change. Yet, the overall process goes on; economic advance, new housing for the growing prosperous groups, "trickle down" of their units to the less prosperous, and liquidation by demolition or redevelopment of the old housing to the shrinking bottom groups.

Although the 'trickle-down' process can be observed operating in our cities' housing markets, it is not entirely clear what the question, "Does trickle-down work as a way to help lower-income families obtain better housing?" implies. In the process of successive occupancy, does a policy which directly aids upper-income people indirectly aid lower-income people?

A tentative way of answering this question is as follows: The argument in favor of emphasizing trickle-down as a means to aid lower-income families hinges on the fact that poor people lack the necessary purchasing power to acquire better housing. However, the cost of decent housing should be broken down into its two component factors to properly analyze the implications of this observation. The two principal types of costs associated with housing are (a) the cost of capital for acquiring the building; and (b) the cost of maintaining and operating the building. If (a) is the more important cost factor in limiting the availability of housing for the poor, then a policy of helping moderate- and upper-income families will probably help the poor by means of increasing the supply of housing and facilitating the trickle-down mechanism. However, if (b) is the limiting factor, a moderate-income directed subsidy will not help the poor afford the cost of housing. The mere availability of a housing structure would do nothing to reduce maintenance and operating costs.

The next question is, then, which of the two types of cost factors is more important for limiting low-income access to better housing? One study has pointed out that maintenance costs are often so important that "good" housing may deteriorate in about two years through the lack of proper maintenance.* The policy implication from this is that even if middle- and upper-income housing subsidies do affect the housing available to poor people, the maintenance question still remains, and hence the appropriateness of 'trickle-down' as a strategy for low-income housing aid still remains unresolved. The issue to be decided is whether each dollar of Federal money would have more effect on low-income housing through the indirect process of trickle-down or through a more directly focused subsidy (neglecting here, of course, gains to moderate- and upper-income people).

A PARADIGM OF HOUSING TRANSFER

	YEAR I	YEAR II
HOUSEHOLDS		
TOTAL	1 MILLION	2 MILLION
LOWER CLASS (25%)	250,000	500,000
MIDDLE CLASS (50%)	500,000	1,000,000
UPPER CLASS (25%)	250,000	500,000
MEDIAN INCOME		
ALL	$ 5,000	$10,000
LOWER CLASS	2,500	5,000
MIDDLE CLASS	5,000	10,000
UPPER CLASS	10,000	20,000
NUMBER OF HOUSES		
TOTAL	1 MILLION	2 MILLION
A	250,000	DEMOLISHED
B	500,000	500,000
C	250,000	250,000
D	NOT BUILT	750,000
E	NOT BUILT	500,000
MEDIAN HOUSE VALUE		
ALL	$10,000	$20,000
A	5,000	DEMOLISHED
B	10,000	10,000
C	20,000	20,000
D	NOT BUILT	20,000
E	NOT BUILT	40,000

A PARADIGM OF HOUSING TRANSFER

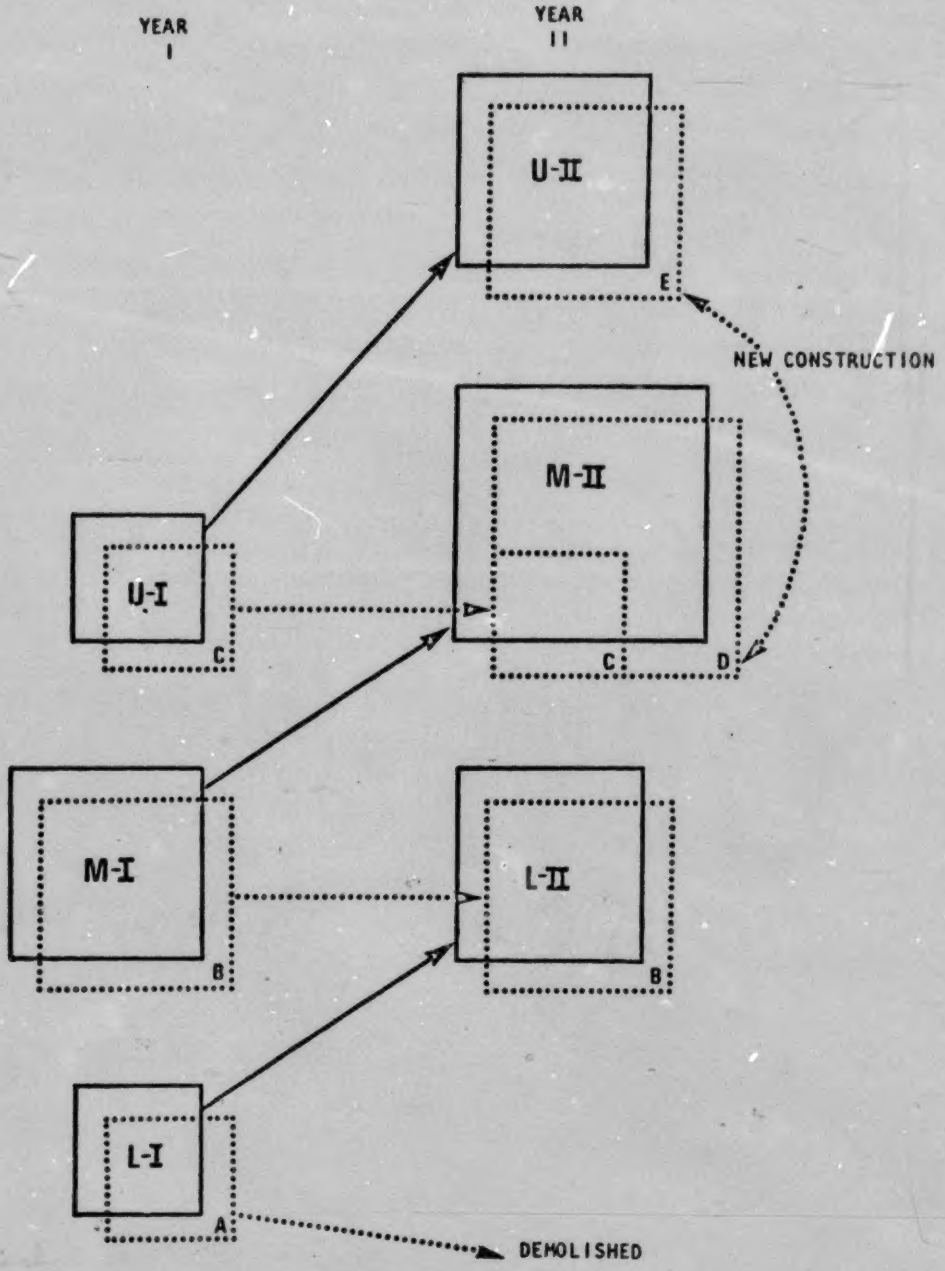
YEAR
I
YEAR
II
U-II
E
NEW CONSTRUCTION
M-II
U-I
C
C
D
M-I
B
L-II
B
L-I
A
DEMOLISHED

TABLE 1

CHANGES IN METRO AREA OWNER OCCUPIED HOUSING 1960-1970

(CURRENT $)	MEDIAN INCOME	MEDIAN VALUE
ALL UNITS 1960	$ 6,600	$13,500
DEMOLITIONS	4,100	9,000
SAME UNITS - 1960	6,800	13,700
- 1970	10,000	18,600
NEW CONSTRUCTION	12,600	24,700
ALL UNITS 1970	10,700	20,000
(CONSTANT $'70)		
ALL UNITS 1960	$ 8,650	$17,700
DEMOLITIONS	5,400	11,800
SAME UNITS - 1960	8,900	17,950
- 1970	10,000	18,600
NEW CONSTRUCTION	12,600	24,700
ALL UNITS 1970	10,700	20,000

HC(4)-1

The final 'passive' supply-side strategy to be mentioned here is efforts aimed at cutting the cost of new housing in order to bring it down to the price range of a lower-income family. Unfortunately, this method of improving the housing conditions of the poor must be readily rejected as not particularly fruitful. While lower housing costs would certainly be desirable for the nation as a whole, it would have little effect on the poor. The potential savings available here are not by the widest stretch of the imagination sufficient to bring the cost of housing down to what a poor family can afford. The table below illustrates the distribution of costs of occupying a new single family house a few years ago. There is no reason to think that these have significantly changed, except in an upward direction. As shown here, most of the large costs incurred in new housing are not in construction or in land but in local taxes and in mortgage charges. There is no way costs of a current $25,000 house can be reduced enough to bring it down to the range where a person with under $5,000 annual income can afford it. In large part, lower-income groups will have to continue using older housing delivered to them by trickle-down, or else get massive subsidies to make up the difference between their income and the real cost of a house.

TABLE 2

MONTHLY HOUSING COSTS--$16,000 HOME

(1968)

LAND	$ 4 (2%)
DEVELOPMENT	9 (5%)
CONSTRUCTION	29 (17%)
INTEREST	50 (29%)
TAXES	45 (26%)
UTILITIES	29 (17%)
MAINTENANCE & REPAIR	8 (5%)
TOTAL PER MONTH	$174

Mobile Homes

However, there is one cost-cutting type of housing which presents possibilities--mobile homes. This form of housing is not familiar to most urban-oriented commentators on housing and to most middle-class people it has a somewhat unpleasant association. However, the rapid growth in mobile home sales, combined with the fact that conventional housing is stable relative to income, suggests that mobile homes have become very attractive to large numbers of lower-income families. As shown on Table 3, mobile home shipments have been growing rapidly over the past decade and, despite crippling restrictions in many places, are rapidly finding favor in many rural areas. Most of these homes are not "mobile" at all, but only move when they are shipped from the factory to the site. Such sites are usually of two types--either in trailer parks which are tightly regulated in many states or on foundations on normal housing lots. In Pennsylvania, for example, the state courts have held that a municipality cannot discriminate between a trailer and any other type of housing, provided it meets other standards of the zoning ordinance.

Trailers are fairly inexpensive; a conventional unit today ranges in price between $5,000 and $10,000 fully furnished and usually includes air-conditioning. This price of course does not include the site or the installation and/or foundation payments. Although recently it has been found that trailers last a good deal longer than people expect them to, their construction is such that one cannot expect them to last as long as conventional houses. This lack of longevity is reflected, too, in the financing arrangements available for their purchase. Banks will finance loans on mobile homes on terms more similar to an automobile loan than a home mortgage, which means that the mobile home purchaser will have to pay a higher interest rate (compared to a mortgage) and must pay off the principal in a relatively short period of time. This is definitely disadvantageous to the buyer of a mobile home.

TABLE 3

MOBILE HOME SHIPMENTS, 1969

REGIONS

NORTHEAST	45,000	
NORTH CENTRAL	105,000	
WEST	60,000	
SOUTH	203,000	(49%)
	413,000	

BIGGEST STATES

FLA.	34,000
TEX.	29,000
GA.	24,000
N.C.	23,000
MICH.	20,000
CAL.	19,000
PA.	17,000
OHIO	16,000
N.Y.	13,000
ALA.	13,000

F. BLAIR, "MOBILE HOMES AND THE GENERAL HOUSING SUPPLY" A REPORT FOR THE MOBILE HOMES MANUFACTURERS ASSOCIATION PREPARED BY THE AMERICAN SOCIETY OF PLANNING OFFICIALS, 1970.

TABLE 4

MOBILE HOME RESIDENTS

INCOME IN 1969 ($000)	THOUSANDS OF HOUSEHOLDS OWNED	RENTED	ALL
LESS THAN $2	215	62	277
$ 2-3	119	32	151
3-4	122	34	156
4-5	127	32	159
5-6	147	32	179
6-7	151	28	179
7-10	422	57	479
10 +	449	44	493
	1,752	321	2,073
MEDIAN	$7,000	$5,000	+ $6,500

USBC HC(2)-1-8

It may even be that a mobile home is not cheaper to occupy per unit of space than is a conventional house, particularly considering that trailers depreciate over the years more like a car, rather than appreciate like a house. Nevertheless, these units are finding increasing favor everywhere. As we shall discuss later, it is possible that mobile homes are in themselves a partial answer to the low-income housing problem in the United States.

However, Government policies either advocating or controlling the expansion of mobile homes have been strikingly absent. Initial investigations have revealed that although mobile homes appear to meet the physical housing requirements of certain moderate-income households, the costs associated with mobile homes are above what the majority of (rural) low-income households can afford. The particular financial arrangements associated with mobile homes ownership--the high down payment, site preparation fee, and high monthly charges--make it difficult for low-income families to handle the costs. Additionally, there are safety and durability questions about mobile homes which have as yet not been satisfactorily answered.[*] But there are a number of steps which could be taken to solve these problems. The Government could lead the way in developing the actuarial data base needed before a change can be initiated in the financing arrangements currently being used for mobile home purchases. This the Government did for home mortgage arrangements through its FHA insured-loan program. The full implications of wide-scale reliance on mobile homes to meet low-income housing problems have not been ascertained. However, particularly in this country's warmer climates, these homes have become increasingly popular.

2. 'Active'

One of the principal strategies employed in recent years to aid low-income families with their housing problems (as well as the income classes directly above this group) has been through the provision of subsidies to housing producers. It was hoped that housing could then be delivered to low-income families within the range of their financial capabilities. The supply-side subsidy strategies which we will look at briefly are the Public Housing Program, and the programs known as Section 221(d)(3), Section 235, and Section 236. The following diagram shows the different ways that subsidies can be used to reduce the cost of the housing. As we shall see later, subsidizing housing costs is closely related to all other forms of welfare-oriented subsidies. To some extent, a subsidy for housing is intended to reduce the amount of income that a family pays for its housing and hence leads to a release of funds for other purposes. The U.S. has a fairly long history of subsidizing housing supply and that experience is flawed in many respects.

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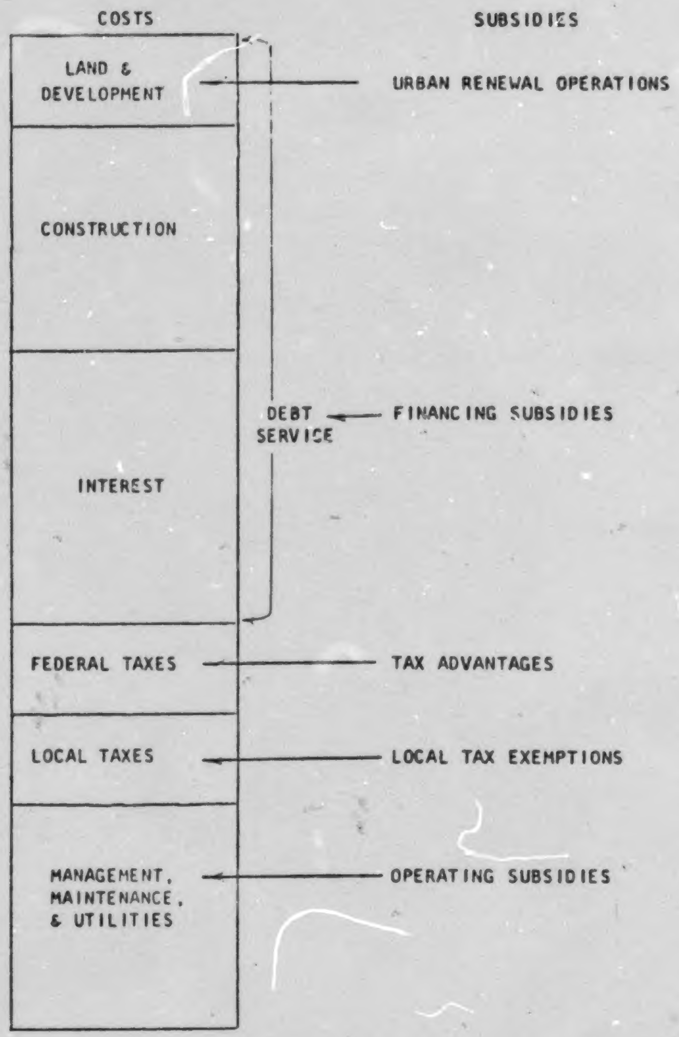
[*] Office of Economic Opportunity, "Mobile Homes and Low-Income Rural Families," PB-216609, February 1973.

SUBSIDIZING SUPPLY


COSTS
SUBSIDIES
LAND & DEVELOPMENT
URBAN RENEWAL OPERATIONS
CONSTRUCTION
DEBT SERVICE
FINANCING SUBSIDIES
INTEREST
FEDERAL TAXES
TAX ADVANTAGES
LOCAL TAXES
LOCAL TAX EXEMPTIONS
MANAGEMENT, MAINTENANCE, & UTILITIES
OPERATING SUBSIDIES

The most commonly known form of supply subsidy is the public housing program whereby a local housing authority (LCA), owned by the municipality or county, makes available units to poor tenants for very low rents. Much has been written about the public housing program since it was enacted in 1937 and because it was the first major involvement by the Federal Government in the problems of low-income housing. Although public housing is a subject worthy of detailed analysis, the arguments both for and against it are by now so well known that only a summary of these points will be presented here.

The low-rent public housing program was initiated by the Housing Act of 1937 primarily as an anti-Depression measure designed to stimulate the building industry and hence the economy in general. There were also a number of secondary rationales connected with the program, among which were to provide housing for those temporarily unemployed by the Depression* and as a strategy to clear out the slums in the cities.** The Federal Government was authorized to provide the necessary funds to fully amortize the capital costs of erecting public housing projects, with the provision that tenants' rents would cover operating costs. Additionally, the projects were to receive an implicit subsidy from the local government unit in the area through an exemption from the local property tax.

Recent amendments to the act have changed the public housing program in the following ways:

1. since 1965, local housing authorities have been permitted to lease private units and sublet them to public housing tenants (Section 23);

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*Lawrence M. Friedman, Government and Slum Housing, A Century of Frustration (Chicago: 1968).

**Harold J. Wolman, Politics of Federal Housing (New York: 1971), p. 40.

2. since 1967, HUD has been providing contributions toward amortization of the cost of rehabilitation of older public housing projects;

3. since 1970, more than half the new projects were being built under the 'turnkey' system, under which the local housing authority buys a completed project from a private developer;

4. quite recently, since the Brooke Amendment stipulates that the local housing authority could charge no more than a maximum of 25 per cent of the adjusted annual income of tenants, Federal operating subsidies have been given to these authorities to cover unmet expenses.

Reflecting somewhat the regional distribution of those families who are faced with poor prospects for obtaining standard housing, half of all projects (38 percent of all units) are in the South. Projects in the Northeast number 18 percent of the total.

In 1972 only 14 percent of new units placed under contract utilized the original construction approach for the projects. 'Turnkey' projects had risen to 35 percent of the total, while private leasing was used in 38 percent of the units added, and acquisition of property accounted for 9 percent of new units. This change reflects the fact that it has been relatively more expensive for the Government to handle the construction of new housing than for private industry to do the job.*

In addition, what is known as leased public housing has become more popular lately. Under this process the local housing authority leases old or newly constructed buildings from private owners and then rents these units to low-income families. There are two advantages with this approach: first, the existing housing stock is better utilized and high-priced construction is thereby avoided; and second, it is less expensive than traditional methods for providing public housing.

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*Journal of Housing, April 1973, p. 182.

Public housing has been a political hot potato ever since it was originally passed--it has alternately been praised and condemned. One typical positive view of the program is that the

> ...Actual and prospective tenants seem to regard public housing as a better buy than any housing available to them on the free market. Most projects have extremely low vacancy rates and long waiting lists for admission. The public image ignores the extremely heterogeneous architecture, tenant population, management efficiency, social service provisions, and other amenities of public housing.[*]

But a typical negative analysis notes that,

> ...The deficiencies of public housing went far beyond any normal degree of malfunctioning. It was bound to be so from the beginning. Public housing was never able to break away from the sources of trouble that were built into it initially. It was born with profound defects, and the hostile environment in which it grew aggravated its congenital ailments.[**]

The American public, while recognizing the need for Federal efforts to aid low-income persons obtain suitable shelter, has certain deep reservations about the way the public housing program has worked.

The criticism of the public housing program can be organized into two categories: political difficulties and technical problems. In other words, two basic questions can be raised about the public housing program. First, why has this program not been pursued more vigorously and why have funding levels not been raised? (This is related to the political difficulties of the program.) Second, given the level of funding that it has had, why has not the program been more successful? (This is related to its technical problems.)

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[*] Henry J. Aaron, Shelter and Subsidies: Who Benefits from Federal Housing Policies? (Washington, D.C.: 1972), p. 108.

[**] Leonard Freedman, Public Housing: The Politics of Poverty (Los Angeles: 1969), p. 105.

We would like to focus first on the technical difficulties experienced by public housing. First, there were unexpected, relatively high costs per unit in the projects. Because of the long term obligation of the bonds used to finance the projects, the bureaucratic quality of the maintenance, and the less than ideal behavior of some of the tenants and persons from the neighboring areas, the buildings were built to much higher durability standards than privately constructed units. Moreover, there seemed to be a good deal of bureaucratic inefficiency and some rather dubious bidding practices for construction contracts in the program, all of which resulted in extremely high construction costs.

To help correct some of these problems, there has been an increasing tendency toward private construction of public housing units, as mentioned before, the local authority taking them over when they are completed (the 'turnkey' process). Apparently, high construction costs are not the problem now that they once were. As suggested by Table 5, the gap between private multifamily and publicly supported housing construction costs has narrowed in recent years.

TABLE 5

CONSTRUCTION COSTS OF NEW HOUSING STARTS, 1960-70

	PRIVATELY OWNED SINGLE FAMILY	PRIVATELY OWNED 2 OR MORE FAMILIES	PUBLICLY OWNED
1960	$13,725	$8,498 (71%)	$12,025
1965	16,150	8,847 (70%)	12,625
1969	19,225	11,011 (79%)	14,700
1970	18,325	11,668 (77%)	15,200

1972 STATISTICAL ABSTRACT, P. 681

A second major set of problems arose from the physical designs used in the projects. Public housing projects have been criticized for a general stylistic non-responsiveness to the particular needs and problems of low-income families. They have also been criticized for bringing together too many high-problem families in too small an area. However, there are a number of factors which led to this situation. First, the architects were tightly constrained by the Government's desire to maximize the durability and efficiency of the units, so their designs could not be terribly innovative. Additionally, the amount of space available compared to the number of units needed ultimately led to the high-rise design now so condemned.

The social dynamics and urban development patterns in cities also contributed to the concentration factor cited above. Suburbanites and many of the middle class that left the city repeatedly and vociferously objected to the location of public housing near to them--ostensibly because of the threat it posed to their property values, to the local tax rate and school expenses, and to the intangible "character" of their neighborhoods. Additionally, the desire to exclude blacks from their neighborhoods has been a hardly subtle rationale. This, then, meant that public housing projects had to be located in the older sections of town, particularly redeveloped slum land. This inability to "spread out" resulted in relatively few projects being built, with relatively high concentrations of units per acre. Thus, this dynamic situation of racism, property economics, the original program design to "tear down the slums," and the use of high-rise structures in the housing projects concentrated families with the most severe social, medical, and emotional problems of any sub-group in the population. The result of all this was an explosive situation far different from the relatively benign intent of the original public housing legislation.

The political difficulties faced by the public housing program are in part derived from a disillusionment resulting from the technical difficulties of the program. The proponents of public housing have been hard-pressed in continually explaining how poor legislative design or unforeseen factors rather than the goals of the program have led to the difficulties thus experienced.

Additionally, the poor have historically been a weak constituency and have had little political voice. When confronted with the notion that the public housing program was never really 'intended' to help the poor but just the 'temporarily' poor of the Depression, and given the fact that this program is specifically contrary to the private sector interests of such groups as the National Association of Real Estate Brokers and the National Association of Home Builders, little effective political opposition can be mustered in the Congress to deflect program cuts or procedural changes.

Finally, public housing has come to be perceived as a visible threat to the stability of whatever neighborhoods it is built in. Most people are afraid of the large concentrations of low-income families that come with such projects. Thus, grass-roots political opposition to expansion of the program is quite strong.

The purpose of the original public housing act was to reach very low-income families, and while the program does not deviate very far from the espoused goal, neither does it exactly achieve it. The 1966 median income of public housing recipients was $2709. However, many of the very lowest-income poor are not served. In fact, only 1.5 percent of the 1,800,000 households earning less than $1000 annually are served. The largest income category aided by public housing is the $1,000-$2,000 group, and even in that category, only 7.4 percent receive benefits. On the other hand, 95 percent of families earning more than $3,000 per year are not served. While the benefits tend to increase as income decreases, making public housing one of the more progressive housing programs on this index, the size of the benefits varies greatly among same-income recipients, and there is a cut-off point beyond which families cannot continue to live in a housing project.*

In terms of market values, the average public housing unit is almost equal in value to the average private rental unit. The average unit is at least equal to those units occupied by lower-middle-class families. Moreover, this improvement in housing rarely occurs at the expense of consumption of other goods for the low-income families who live in public housing.

Large differences occur in the ratio between the number of public housing units per city and the number of poverty-level households located therein, according to density and degree of urbanization. In metropolitan, high density areas, the ratio of public housing units to impoverished families is 1:5; in non-metropolitan, high density areas, it is 1:9; and in non-metropolitan, low density areas, it is 1:16. Thus, despite the popular conception of the urban poor as lacking access to public housing, it is really the rural poor who suffer this lack of housing most acutely.

An administrative decision made by HUD, and which does not necessarily seem justified except when viewed politically, is the authorization of more money per unit of housing for the elderly ($4,000) than for other units

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*The National Housing Policy Review, U.S. Department of Housing and Urban Development, "Housing in the Seventies," October 6, 1973.

($2800), in addition to which, HUD pays up to $120 per year per family more in operating subsidies for elderly tenants.[*]

The cash cost of the public housing program increased nine-fold from $31 million in 1970 to $280 million in 1973, partly as a result of the 1969 Brooke Amendment which limited tenant rent payments to 25 percent of their incomes. In 1971 the value of the housing provided to tenants, as opposed to the actual cash cost to the Government, was $2.3 billion. The costs of public housing are supported as follows: 42 percent is HUD money, 36 percent was covered by the taxes foregone on the money that is earned on housing authority bonds, and 22 percent is the amount of local property taxes foregone.

Public housing has been the principal Federal program ostensibly for aid to lower-income families. However, it has never been funded at levels even approximating the amount needed for the program. Thus, only minorities of lower-income groups have been served by this form of subsidized housing. This can be seen in Tables 6 and 7. Nevertheless, more than a million American families are directly benefiting from this Federally subsidized housing.

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[*] Aaron, op. cit., p. 116.

TABLE 6

HOUSEHOLDS IN PUBLIC HOUSING, 1970

INCOME ($000)	TOTAL HOUSEHOLDS	IN PUBLIC HOUSING
$ 0-2	7,667	349 (4.6%)
2-3	3,826	201 (5.2%)
3-4	3,650	135 (3.7%)
4-5	3,768	86 (2.3%)
OVER 5	44,535	126 (NEGLIGIBLE)
TOTAL	63,446	897 (1.4%)

USBC HC(2)-1-6; 1970
HUD STATISTICAL
ABSTRACT

TABLE 7

SUBSIDIZED HOUSEHOLDS, 1972

INCOME*	HOUSEHOLDS	SUBSIDIZED HOUSING
$ 0-2	5,600	346 (6%)
2-3	4,300	290 (8%)
3-4	4,000	236 (7%)
4-5	3,800	216 (6%)
5-6	3,800	213 (6%)
6-7	3,600	180 (5%)
7-10	11,200	174 (1%)
10 +	32,300	23 (NEGLIGIBLE)
0-5	17,700	1,088 (6%)
5-10	18,600	567 (3%)
10 +	32,300	23 (NEGLIGIBLE)

*($000)

HUD "HOUSING IN THE
SEVENTIES" (1973)

The other principal supply-side strategy for aid to lower-income housing is the provision of below-market interest rate loans to developers, with the provision that these cost savings be passed on to the occupants in the form of lower rents or mortgage payments. Such supply-side subsidy strategies can be analyzed by the use of the following criteria:[*]

1. the subsidies should be highly visible, not hidden, so that the true cost is readily apparent to legislators and voters;
2. the money should actually reach the intended beneficiaries;
3. the subsidy mechanism should produce a minimum of economic 'mischief'

Section 221(d)(3) Program

One of the early attempts at subsidizing housing supply was through the Section 221(d)(3) program established in 1961. There were two basic parts to this program. First, there were provisions to insure loans through the Federal Housing Administration for rental or cooperative housing for elderly and handicapped families with low incomes. Although this provision carried with it no 'subsidy' funds, it did make the acquisition of privately funded loans much easier because there was, in effect, no risk with the loan. Additionally, there were some subsidy funds available for construction of units for elderly, handicapped, or displaced low- to moderate-income families. There were many restrictions, however, which had to be met in order to qualify for such subsidy aid.

This program was plagued early, though, by administrative problems and delays and also lacked political support because the myth grew up that it assisted households with higher incomes than Congress or the Administration had originally intended. The program benefits were to be der[illegible] from the 'savings' made possible from the use of below-market interest rate loans to construct the housing. The reduced costs obviously depended on the rate at which the housing developer would otherwise have had to pay on a loan. With a market interest rate at 6.5 percent, a 3 percent loan (the rate established in the program) makes possible an estimated 27 percent reduction in rents. With market interest rates at 9 percent, a rent reduction of 37 percent can be achieved. Estimates of Government subsidy support under this program are shown on Table 8.[*] The annual amount of financial benefits derived from this program was approximately $11.8 million in FY 1968, was up to $27.9 million in 1970, and will be $50.1 million at the end of FY 1972.[**]

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[*] Suggested in Garry Breckenfield, "Housing Subsidies are a Grand Delusion," Fortune, February 1972.

However, political problems ultimately overcame this program. One important reason for the program's demise was its limited appeal to profit-oriented developers or investors. There were many stringent requirements which had to be met for funding under the program; hence it proved unattractive to many investors. In addition, the inflexibility of the subsidy caused problems. The subsidies which were available to families with incomes of $10,000 or $2,000 were the same. The amount of the subsidy was unrelated to need as judged either by tenant income or by management costs. For these and related reasons, the Section 221(d)(3) program was terminated with the passage of the Housing and Urban Development Act of 1968 and was replaced by the Section 235 and Section 236 program in that Act.

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[*] Page 101.

[**] Henry J. Aaron, op. cit., p. 130.

The Section 235 Program

The Section 235 program was designed to affect a slightly higher income group (moderate-income families, $5,000 to $9,000 annual income) than did the public housing program. The significant characteristics of this program are (1) that it is basically a production program designed to increase the supply of housing and (2) the subsidy payments are tied to the dwelling unit. Section 235 was enacted as an integral component of the programs designed to meet the goal established during the late years of the Johnson Administration, of six million new or substantially rehabilitated units of low-income housing by 1978. The HUD Section 235 Handbook, issued in January 1973, summarizes the purpose of this program:

> The program is intended not only to produce more homes, but to enable lower-income families to become owners of homes and thereby experience the pride of possession that accompanies homeownership. In this way, the program can be a vital influence in promoting personal responsibility and social stability.

By having the Government subsidize interest payments and mortgage insurance, this program sought to bring the cost of purchasing a house down to what a lower-income family could afford. The actual subsidy granted a family is calculated as the lower of either: (1) the difference between 20 percent of monthly adjusted income and the total monthly payment under the mortgage for principal, interest, morgage insurance premium, taxes, and hazard insurance; or (2) the difference between the monthly payment for principal, interest, and the mortgage insurance premium, and the payment to principal and interest at a one percent interest rate. Approximately $550 million annually was available under this program to start construction of new units before the program's funds were frozen by President Nixon early in 1973.

Although Section 235 has only been in operation a fairly short period of time, there is not much dispute about the fact that a substantial amount of housing has been produced as a result of its supportive subsidies. HUD figures show that approximately 398,000 units have been assisted through 1972. The Budget of the United States Government 1973 projects 588,000 units under payment in FY 1973. Table 8 shows the great expansion of Government-initiated housing starts which has taken place in recent years.

TABLE 8

FEDERALLY SUBSIDIZED AND UNSUBSIDIZED HOUSING STARTS

1950-72

Starts in thousands

Period	Total, all housing starts	Conventionally constructed starts: Total	Conventionally constructed starts: Subsidized	Conventionally constructed starts: Subsidized, as percentage of total	Mobile homes
1950-59, ann. av.	1,597	1,505	41	2.7	91
1960-68, ann. av.	1,617	1,434	68	4.7	183
1969	1,913	1,500	197	13.1	413
1970	1,868	1,467	431	29.4	401
1971	2,581	2,084	426	20.4	497
1972	2,954	2,378	336	14.1	576

SOURCE: The Brookings Institution, Setting National Priorities, the 1974 Budget.

The most significant factors which generated support for the passage of this program and the related Section 236 Rent-Subsidy Program were:

(a) the need to prepare for a potential housing shortage which was believed to be imminent because of the projected large rise in household formation rates and population increases;

(b) the need to do something about the "urban crisis"; and

(c) two methodological issues

  (1) the strategy of tying the goals of the program to new construction (gaining the support of the construction industry);

(2) the delayed budgetary impacts of the financial mechanism used in the program (which eased the political effects of paying for the program)

On January 5, 1973, new commitments under Section 235 (as well as under other subsidy programs) were suspended by the President. In the subsidy freeze order the President questioned the disjointed nature of Federal programming for low-income housing. He implied that time was needed to sort out the administrative problems which had resulted in the subsidy programs and to give a serious look at alternatives to subsidizing housing supply as a way to handle the low-income housing problem. However, the President's desire for budgetary control was also quite obviously involved with the decision made to hold back these funds. A strenuous debate has developed as a result of this freeze on new subsidized commitments. The Administration's position can be summed up in the view expressed in this statement by the then Secretary of HUD, George Romney:

> It became crystal clear by 1970 that the patchwork, year-by-year, piecemeal addition of programs over a period of more than three decades had created a statutory and administrative monstrosity that could not yield effective results even with the wisest and most professional management systems.*

Additionally, escalating program costs and their delayed budgetary implications were mentioned as reasons for the freeze.

A number of the members of Congress, various state and local government officials, and leaders of the housing industry, though, have taken issue with the Nixon Administration about the program suspensions. Typical of the comments opposed to the suspensions is the following statement by the National Association of Home Builders:

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*Quoted from "Housing Subsidies and Housing Policy," a report of the Subcommittee on Priorities and Economy in Government of the Joint Economic Committee, the United States Congress, March 5, 1973.

> We are seriously disturbed about this situation [the suspensions]. We question and wonder why programs which have worked extremely well two or three years ago, now all of a sudden are inherently unworkable. We look with dismay at the disarray which exists throughout many of the field offices of the Department of Housing and Urban Development, where morale is low and personnel are confused as to their mission and their future.*

At the present time, the freeze order is still in effect, although a few additional commitments have been authorized.

We would now like to summarize the arguments which have been advanced either in support of this program or in criticism of it. One of the principal Administration criticisms of the present Section 235 program is that the benefits from the program do not reach the people they were intended for; that is, there are distributional inequities in the program. The Administration contends that the intent of the original legislation was for the program to primarily assist low-income families. They cite the establishment of income restrictions for eligibility to imply that the benefits of the program are to be for a certain group--the lower-income group. They contend that if the Congress had not intended this program to benefit certain groups, then participation would not have been limited in the manner it was. Additionally, Administration sources cite a Harris Poll, done privately for HUD, which indicated popular support for subsidies helping low-income families but not also for those which aided middle-income families.

The National Housing Policy Review (NHPR), and internal HUD study commissioned by the President, made two observations about the matter of equity in the Section 235 program: first, the program provides substantial aid to a small number of the poor and the near-poor but no assistance at all to other equally needy people; and second, the subsidy formula treats higher-income participants of the program more advantageously than lower-income families in the program.

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*From testimony given by the National Association of Home Builders, "Oversight on Housing and Urban Development Programs," Hearings before the Subcommittee on Housing and Urban Affairs, Committee on Banking, Housing, and Urban Affairs, April 4, 1973, p. 278.

Recent HUD data indicate that only 12.6 percent of families served by Section 235 have incomes of less than $5,000 annually and that this group is only 1.2 percent of all families in this income classification. In the largest income category affected, those with annual incomes from $6,000 to $6,999, only 2.7 percent of the potentially eligible families receive assistance.*

HUD data also suggest that the lower-income families in the program receive less extensive benefits than the relatively higher-income families. They suggest that those receiving a maximum subsidy under the second formula cited on page 100 above, which are usually lower-income families, must bear increases in taxes and insurance without increased assistance. The higher-income families who usually are treated under the first formula, have their subsidy raised to cover the entire increase in taxes or insurance until the second formula is reached. (However, as Table 9 indicates, this assertion may not be very significant, if even accurate.)

Certain members of the Congress have questioned whether it ever was the legislative intent for the Section 235 program primarily to aid low-income families as opposed to easing the housing supply situation in the next higher-income group, given the fact that the Section 235 program is a home-ownership program.

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*The National Housing Policy Review, op. cit., pp. 4-48.

Additionally, geographic maldistributions in program benefits are noted by HUD. For example, as of June 1969, 46 percent of reservations and obligations were in Southern or Southwestern regions while less than 15 percent were in the Northeast and mid-Atlantic regions. Such a pattern of distribution is still occurring with recent Section 235 starts. One interpretation of the skewed distribution is that the areas with the most 235 activity are those with the lowest construction costs and the most amenable climates (to take advantage of the concomitant lower maintenance costs). HUD claims that poor legislation has brought about this type of distribution because of the type of incentive it uses in the subsidy formula.

TABLE 9

The monthly Cost of Ownership for Selected Family Income Groups With and Without Interest Subsidies

(1) Adjusted Gross Annual Y	(2) Adjusted Gross Monthly Y	(3) 20% Adjusted Gross Monthly Y	(4) % Income Toward Housing Expense Without Section 235 Assistance	(5) Maximum Monthly Housing Subsidy Under Section 235	(6) Monthly Housing Expense with Section 235 Assistance	(7) % Adjusted Gross Y Toward Housing with Section 235 Assistance
$3,000	$250	$ 50	86	$76.72	$137.78	55
3,600	300	60	72	76.72	137.78	46
4,200	350	70	61	76.72	137.78	39
4,800	400	80	54	76.72	137.78	34
5,400	450	90	48	74.50	140.00	31
6,000	500	100	43	64.50	150.00	30
6,600	550	110	39	54.50	160.00	29
7,200	600	120	36	44.50	170.00	28
7,800	650	130	33	34.50	180.00	26
8,400	700	140	31	24.50	190.00	27

Source : M. Stegman, "Homeownership and the Poor", in M. Stegman (ed.), Housing and Economics

However, as pointed out in Congressional hearings on this distribution question, the distribution pattern of Section 235 activity may likely be a consequence of local limits to industrial production capacity as well as faulty HUD administration of the legislation. It is suggested that this poor administration may be a consequence of excessive workloads in the local offices as well as inadequate administrative guidelines from HUD in Washington.

An additional source of criticism by the Administration is that this subsidy program may not be getting the "bang for the buck" that it should. The recent National Housing Policy Review broke down the costs of this program into the following four areas:

1. direct subsidy, which for 1972 was estimated at $948 to each mortgage;
2. foregone taxes, which for 1972 were calculated to be $61 for the average family occupying Section 235 housing;
3. administrative costs, which were figured to be $55 per unit in 1972;
4. the use of the Tandem Plan for purchasing 235 mortgages, which was estimated to cost $24 per mortgage in 1972.

Thus the total cost in 1972 of the program to the Federal Government was $1,088 per unit, or approximately $400 million overall.*

The benefit that derives to the participants in this program is described as "extra housing," a measure of the difference between what the unit would have cost in the private marketplace and what the owner actually pays toward the mortgage. Recent studies have shown that construction costs for Section 235 units were very similar to those of conventional units; therefore, the owner under 235 can be said to receive the full value of the subsidy, $948, in the form of extra housing.

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*National Housing Policy Review, op. cit., pp. 4-52.

The National Housing Policy Review group at HUD offered the following conclusions about this program:

1. Total government costs are about 15 percent greater than the cost of the subsidy. Foregone taxes and administrative costs account for most of the difference.
2. A dollar spent by the government on the Section 235 program results in 'only' 79 cents' worth of benefits from the viewpoint of the recipient.
3. The study did not demonstrate that Section 235 housing costs more than comparable privately produced units.
4. Counterproductive program incentives may reduce the efficiency and equity of the program. These structural "incentives" aimed at builders and developers rather than the intended beneficiaries may lead to more expensive homes and higher default and foreclosure rates.

A tentative opinion offered on these conclusions is that they do not sound particularly 'bad,' at least not bad enough in themselves to justify a massive freeze of the program.

One of the most significant issues related to the economic efficiency of this program has to do with the default and foreclosure rates on the mortgages of 235-assisted housing. Because of the high level of publicity which has been given to this issue, we would like to direct some discussion toward this item.

The National Housing Policy Review staff commented: "The insurance fund for Section 235 appeared to be actuarially sound through 1972, but recent trends in foreclosures and assignments throw this conclusion into doubt."* However, there has been some heated disagreement over this interpretation. Recent testimony by Philip Brownstein, formerly Assistant Secretary of HUD and now an attorney in private practice, is a good example of this:

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*Ibid., pp. 4-47.

> These programs [subsidized housing programs] have been made the scapegoat for most of the housing problems that have surfaced. The large numbers of abandoned houses and acquisitions by HUD of inner city properties are blamed on the Section 235 program. Yet HUD's statistics show that actually most of these were financed under the[*] nonsubsidized programs--Section 221(d)(2) and Section 203(b).

The following two tables may shed some light on this issue:

TABLE 10

COMPARISON OF MORTGAGES IN DEFAULT UNDER SELECTED SECTIONS OF THE NATIONAL HOUSING ACT, AS AMENDED (AS OF END OF CALENDAR YEARS 1971 AND 1972)

Section of the National Housing Act	Dec. 31, 1971, number of mortgages			Dec. 31, 1972, number of mortgages		
	Insurance in force	Defaults	Percent	Insurance in force[1]	Defaults	Percent
Sec. 203.	4,338,830	82,876	1.91	4,273,704	89,680	2.10
Sec. 221(d)(2). . .	454,120	23,498	5.17	500,939	29,706	5.95
Sec. 223(e)	86,915	3,111	3.58	95,455	3,137	3.29
Sec. 235.	268,986	12,326	4.58	372,693	23,644	6.34

[1] Data for insurance in force as of Dec. 31, 1972 is preliminary, all other data is actual.

Note: Defaults shown are for mortgages for which payment has not been made by the mortgagor for 30 days or more after the due date. Defaults also include properties on which the title is held by the mortgagee.

TABLE 11

FORECLOSURE RATES BY AGE OF MORTGAGE (FROM A HUD STAFF REPORT)[1]

Age of mortgage:	Sec. 221(d)(2)	Sec. 235
1.	0.92	0.71
2.	3.34	1.65
3.	2.74	.73
4.	1.81	....
5.	1.25	....
6.	.81	....
7.	.53	....
8.	.33	....
9.	.23	....

[1] Excludes relatively large numbers of mortgage assignments. Note: Under the provisions of the 1968 Housing Act it is considerably easier to assign Sec. 235 mortgages than those under the other single family programs. Under the assignment procedure these families may remain in the home and the opportunity exists for them to cure their defaults.

(Source for both charts: "Oversight on Housing and Urban Development Programs.")

The first table shows how the percentage of defaults compares for the last two years among related programs. The second table shows how the foreclosure rates vary among various programs according to the age of the mortgage. The first table appears to show that the default rate for the 235 program is bad compared with the other programs and that it is getting worse. Significantly, this chart was used by HUD Secretary James Lynn to substantiate the Administration position for suspension. The second table appears to indicate that the foreclosure rate on Section 235 properties is not as large as other programs, particularly the 221 (d)(2) program. Also significantly, this chart was used by the National Association of Home Builders to lend credence to their arguments against the current suspensions.

However, we believe that both tables may be somewhat misleading and may present data which are subject to misinterpretation. The ages of the different programs being compared may make a great difference; that is, it may not be totally accurate to look at the way defaults on Section 235 properties are occurring in comparison to an older program like 221 (d)(2), because the default rate is probably the largest during the early promulgation of the program, before administrative problems can be worked out. Therefore, comparing the current default rates of two programs of such differing ages (Section 221 (d)(2) is twice as old as Section 235) may not be appropriate.*

Likewise, the early low foreclosure rate in the Section 235 program shown in Table 11 may not be representative of later foreclosure rates. Indications are that HUD is currently being quite lenient in granting extensions and in working out special arrangements so that families will not lose their homes and HUD be left with the property. The number of foreclosures will therefore probably rise after these additional contingencies are exhausted.

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*See testimony by Mr. Elmer B. Staats, Comptroller General of the U.S., "Oversight on Housing and Urban Development Programs," op. cit., p. 468.

If the number of units reaches 1.4 million through FY 1978 as planned, and the average loss to manage and dispose of an acquired Section 235 property is still the current figure of $3,800, the losses eventually incurred with a default rate of 10 percent would be about $532 million dollars. However, HUD may be able to reduce the incidence of defaults by strengthening the administrative practices for screening prospective homeowners and by providing better counseling support for new homeowners.

Another matter of political concern has to do with the apparently widespread occurrence of shoddy construction and questionable real estate practices supported by Section 235 monies. The Congress has criticized HUD administration of the 235 program for this situation, reporting poor sites and poor-quality construction in projects in Baltimore, Boston, San Antonio, Spokane, and Columbia, South Carolina; and blockbusting and real estate specultaion in connection with Section 235 projects in Detroit, Boston, New York, Philadelphia, Washington, Chicago, Newark, and St. Louis. Also, a physical inspection, performed in early 1971 by HUD auditors and monitored by the GAO, showed that of 1,281 Section 235 properties selected on the basis of a statistical random sample, about 24 percent of the new houses and about 39 percent of the existing houses had defects.*

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*"Housing Subsidies and Housing Policy," _op. cit_.

Secretary Lynn has fundamentally agreed with the Congressmen on this issue. There has been a good deal of corruption and lack of quality control in the 235 program. However, Mr. Lynn also points out that legislation which leads to so much construction so quickly, without providing additional support for expansion of HUD staff capabilities, virtually invites such a situation. These mistakes are going to be very expensive. Currently HUD is spending $2 billion a year to bail out the housing subsidy programs on a massive wave of defaults on Federally-insured mortgages.[*]

What kind of judgments can be made about this highly politicized Section 235 Program? Using the criteria suggested earlier (a. visible nature of subsidies; b. money actually reaching intended beneficiaries; and c. minimum of economic mischief from the subsidy on the private market), the following tentative conclusions are offered.

The subsidies extended under the present Section 235 program appear to contain a number of financial "finagles." The use of the Tandem Plan and the budgetary ploy of eventually increasing impact of the costs of the program are not clearly visible to either legislators or voters. The 1972 budget included $3.3 billion for housing and community development expendtures, but some economists figure that in reality the government and government controlled agencies lent or spent about $20.1 billion on housing and related subjects during the fiscal year 1972.[**]

The discussion by the National Housing Policy Review staff about the equity of this program appears quite sound. The Congress has just not funded this program at a level which could lead to wider coverage. Additionally as Brookings economist Henry Aaron has pointed out:

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[*] William Chapman, "Defaults Hit HUD Subsidies," Washington Post, March 16, 1974.

[**] Quoted from G. Breckenfeld, *op. cit.*

> Pressure may arise for increasing the income limits for recipients of (this) assistance. If the limits rise faster than personal income, the program might be converted from devices to aid households who cannot afford adequate housing into a broad system of middle class housing subsidies.*

Senator Harrison Williams, a member of the Senate Committee on Banking, Housing, and Urban Affairs is already talking about "lower income" meaning incomes of $11,000 per year, so Aaron's statemnt may portend a situation of decreased equity in the future. However, the conclusions reached by HUD's own internal study group about the efficiency of this program in producing housing and housing expenditure reductions were optimistic.

A really substantive conclusion on the merits of the Section 235 program will require that the true costs of the program be better delineated, and it msut be decided who the beneficiaries of the program are intended to be. Nevertheless, at this point in time, a freeze on this program's operation seems a little drastic.

Section 236, Rent Subsidy Program

The Section 236 program, the companion program to Section 235, is aimed at moderate-income renters, who pay one-quarter of their adjusted income in rent. HUD pays the difference between tenant rents and fair market rents, or the difference between amortization over 40 years at market interest rates and amortization at 1 percent, whichever is less, to the owner of the project. Up to one-fifth of the units in each project may be occupied by tenants also receiving rent supplements under the public housing program.

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*Henry J. Aaron, op. cit., p. 144.

Section 236 projects are privately-owned and financed. FHA mortgage insurance reduces the risks of investment, and when the FHA interest ceiling is below the market interest rate, the GNMA Tandem Plan is often resorted to. Any nonprofit, cooperative, or limited-dividend organization may sponsor a project. Though the cash return may not exceed 6% of invested equity, the tax advantages that accrue to investors in federally subsidized housing are quite attractive. This is particularly true since the Tax Reform Act of 1969 tightened depreciation formulas for most assets other than housing; lengthened the period that other assets must be held before excess depreciation can be treated as a capital gain; and allowed taxes on sale gains from lower-income rental housing to be deferred if the house is sold to its residents and the proceeds reinvested in similar housing.*

To be eligible for participation in Section 236 housing, a family's income must be no more than 135% of the income limit for public housing in that geographical area at the time of initial occupancy. If a family's income later surpasses that amount, the family loses its housing subsidy, but instead of being forced to change residence, it has the option of remaining and paying the full rent unaided. Tenant composition of 236 projects is 76% white, 20% black, and 3% Spanish-American.

Section 236 housing is attractive to the construction industry when conventional loans are not available, since builders can get a highly-leveraged loan with a low interest rate and then convert it back into capital. The mortgage covers 90% of the entire cost of development, while the 10% equity barely surpasses the amount allocated for builder's profit and risk. Builders do, however, have to put up a small amount of "front money".

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*Henry J. Aaron, op. cit., p. 140.

The criticisms of this program parallel those made of the Section 235 program: (1) the funding and financial commitment mechanism used in this program "hides" the true cost of the program, (2) there are questions about the actuarial soundness of the program, (3) new construction is not the best nor least expensive way to provide better housing to low-income families, expecially for those families in cities where construction costs are very high.

But again it must be noted that a good deal of rental housing has been produced for low-income families through this program:

TABLE 12

SEC. 236 RENTAL HOUSING SUBSIDY PAYMENTS

[Payments in thousands of dollars for fiscal years]

Memorandum:

Number of units supported	361,300
Period covered	1969-71
Maximum years commitment	40
Estimated average minimum years of payment	22

	Total[1]	Annual average
Total payments under commitment:		
Maximum contractual	$13,000,000	$325,000
Estimated minimum	5,578,000	253,545
Present worth of total payments:[2]		
Maximum contractual	5,390,398	134,760
Estimated minimum	3,262,542	81,566

[1] Includes about $13,000,000 in payments made prior to end of fiscal 1971 or 1/10 of 1 percent of maximum contractual payments. Therefore, separate estimates for before and after the end of fiscal 1971 have not been made.

[2] Payments discounted at 5 1/4 percent.

Source: "The Economics of Federal Subsidy Programs," Joint Economic Committee of the U.S. Congress.

One advantage of 236 housing is that the government gets out of the process of providing housing a step earlier than it does in public housing. Thus private builders can and do take advantage of economies of scale, management expertise, and technological advances. However, even with a lessened amount of red tape in this program compared to earlier programs, the load time for a 236 project is still estimated at 120 days.[*] As a result of this time lapse between processing and construction, the builder's exposure is increased, his turnover of capital is slowed down, and his return on investment is thus lower.

In March, 1973, the Subcommittee on Priorities and Economy in Government of the Joint Economic Committee of Congress issued a report making the following criticisms and suggestions concerning the Section 236 program:

(1) "HUD should substitute for its 10% builder and sponsor profit and risk allowance a reduced straight profit allowance which should not be calculated as part of the replacement costs of a subsidized housing project."

(2) Waive the mortgage insurance premium, as has been done with 221 (d) (3) housing. This would save the federal government $1.6 million per year, according to the G.A.O. estimates. The Committee explains this recommendation this way: "Since the subsidy payments include the cost of mortgage insurance premium payments, which are subsequently collected from the mortgages, HUD pays out funds which it later collects."

(3) Allocation of housing subsidies should be related to regional and personal needs. At the local level, allocation has often been on a first-come, first-served basis. In 1971, 11% of HUD-provided units were in the Northeast, which area was calculated to need 32%. Thus geographical location has affected an eligible family's opportunity to participate in the program.

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[*] From David Thaler, "Government Subsidized Housing: Sleeper Market of the Seventies", in George Sternlieb and Lynne Sagalyn (eds.), Housing (New York: 1972), p. 523.

(4) "The G.A.O., in examining land valuation procedures for Section 236 projects in Atlanta, Dallas and Los Angeles found that in 47 of 68 projects HUD had valued project land above cost, and that on the average land valuation exceeded cost by at least 25% in twelve of the 47 cases." HUD should therefore institute a field monitoring system to review the field offices' land valuation practices to prevent windfall profits; variances between HUD appraisal and owner's cost should be "fully justified."

(5) Institute direct governmental loans rather than private mortgage loans, which would decrease the interest rate and result in a savings of $2-4 billion over the life of the mortgages.

(6) Revise the accelerated depreciation schedule to include a reduction and some stretchout of investor benefits, and a modification of the capital gains provision, which would create a greater incentive to continue ownership for longer than 10 years and to provide better management and maintenance.

(7) In isolated instances, HUD offices allowed legal and organizational fees to exceed HUD guidelines by almost 100%. Moreover, some owners fail to remit to HUD rent charges in excess of base rent.

Although the Administration's freeze on new commitments under this program is still in effect, certain demonstrations have recently been made by the Administration to show that it was still interested in the housing needs of lower-income families, even though it is working to phase out "construction"-oriented programs. In early November, 1973, Secretary Lynn announced that the Administration would approve funding for nearly 70,000 additional apartments under the 236 program. This would be in addition to the 100,000 units which were in advanced stages of planning last January when the freeze was announced and were also recently funded. Most of these new units are to be constructed in low-vacancy urban areas--New York City will be receiving about a quarter of this new construction. However, when this announcement was made, Secretary Lynn commented that "the housing we are starting to make available today is an interim step."

This was obviously a reference to the continued desire of the Administration to end the subsidized construction programs in favor of housing allowances.*

Program Details

Over half of all 236 unit tenants earn more than $5,000 per year.** This is due in part to two factors:

(1) The size of the subsidy per family is limited.

(2) Sponsors are not anxious to take on tenants earning below $4,000 per year, for their concern is with a steady flow of rents, and with maintaining flexibility should an increase in rents to cover cost increases become necessary.

The program is regressive in the sense that, while the majority of recipients earn less than the national median income ($9,698), the higher the income of the tenant, the greater the subsidy. Families earning less than $1,000 annually receive $956 in annual benefits; families earning $10,000 or more annually receive an average subsidy of $1,189 per year, the largest average benefit conferred.

While the program serves less than 1% of each income group under $8,000 per year, the income group that has the highest proportion of recipients is the $5,000-$6,000 group (almost one-quarter). The under - $1,000 group comprises only .2% of recipients, whereas the over -$8,000 group comprises 5%.

Through 1972, 142,000 units had been assisted under the 236 program, with $2.2 billion worth of mortgages endorsed. The maximum annual appropriation was $700 million, with the median mortgage amount per unit $16,700.

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*Joseph P.Fried, "U.S. to Fund Nearly 70,000 Apartments", The New York Times, November 3, 1973.

**National Housing Policy Review, op. cit., pp. 4-80 to 4-93.

The market value of rent for a 236 unit was found to be higher than the rent paid for an identical unit on the private market. However, this is attributed to the fact that Federal costs exceed the market value of the housing provided by 4%. Section 236 units are not rent competitive with comparable private units so the direct subsidy involved is spent somewhat inefficiently. In addition, foregone tax revenue, administrative overhead, and foreclosure losses also contribute to the 40% loss figure cited. The program would be approximately 60% more efficient if the family's present unit were upgraded to the same condition as the unit the government currently has constructed for them. This is even assuming that they would continue to pay the same "depressed" rent as would be paid under 236. Thus the efficiency of the section 236 program has been seriously questioned by HUD.

Many of the same conclusions that were reached in regard to the Section 235 program are also applicable here: Section 236 has succeeded in stimulating production of a good deal of housing for low-income families, but this has been achieved under conditions of fairly low efficiency and with very poor equity of program benefits. Additionally, while the program is slightly more attractive to investors and builders than public housing, it has proved to be more vulnerable to corrupt practices than is public housing.

TABLE 13

Distribution of Households Served by Low-Rent Public Housing. Rent Supplements, and Sections 235 and 236 Subsidized Programs

Gross Income	Households Served	Total Households	Households Served As Percent Of Total Households
$0-999	28,000	1,800,000	1.5%
1,000-1,999	318,000	3,800,000	8.4
2,000-2,999	290,000	4,300,000	6.7
3,000-3,999	236,000	4,000,000	5.9
4,000-4,999	216,000	3,800,000	5.7
Under 5,000	1,088,000	17,700,000	6.1
5,000-5,999	213,000	3,800,000	5.6
6,000-6,999	180,000	3,600,000	5.0
7,000-9,999	174,000	11,200,000	1.1
10,000 & up	23,000	32,300,000	less than .5
Totals	1,678,000	68,600,000	

Source: Calculated from Department of Housing and Urban Development data in Housing in the Seventies.

In summary, Table 13 shows the number of households which have been served by the three principal supply-side, subsidized programs; public housing, the Section 235 program, and the Section 236 program. Over one million low-income households have benefited from these programs. However, serious questions have been raised about the advisability of trying to influence the availability of housing for low income-families by constructing new housing for them. This approach is a very expensive proposition and the high program costs mean that only a few of the families needing better housing can be served by the program.

C. Demand-side Emphasis

1. 'Passive'

We now turn to an examination of those government policies and programs which impact on the demand-side of the housing market. As opposed to those programs with a supply-emphasis, the following programs seek to augment or support the ability of low-income families to compete in the marketplace.

Rent Controls

A strategy which could be labeled as a 'passive' demand-side approach is the use of rent controls as a way to hold down increases in rents. While rent controls are not a particularly common strategy nationwide, they are becoming more popular. Rent controls have been used in New York City; Buffalo, New York; Boston; Berkeley, California, and in various localities in New Jersey and Maryland. The rationale for rent controls is quite straight-forward: in a period of unusual economic flux or instability, tenants should receive temporary protection against property speculation and inflation. Although rent controls still remain a marginal issue in most areas of the country and have even led to negative results in some cities, such an approach is increasingly being advocated as a means to relief from sharply rising housing costs.* Therefore, it may be useful to look briefly at the economic implications of rent controls.

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*"City Housing," Municipal Performance Report, 1:2, November 1973.

The broadest application of rent controls has been in New York City, where through 1968 about 67 percent of all renter households (1,267,000 households) were living in controlled rental housing units. However, the utility of rent controls as a device to protect the budgets of the disadvantaged was seriously questioned. Rent controls affect a broad spectrum of people and one source has noted that because of the inability of rent controls to target in on the lower-income group, only about 55 percent of all rent-controlled units were occupied by households which could reasonably be described as poor.[*] Therefore, partly as a response to dissatisfaction with the results of the program in holding down rent increases and its poor equity factor in aid to lower-income families, but probably primarily due to landlord pressure for rent increases, the use of rent controls is being phased out in New York.

In order to understand the market implications of rent controls, the following simple supply and demand analysis may be useful. Standard economic theory would suggest that the use of price controls should only be a short-run proposition. Any longer term reliance on controls to hold down price increases would merely warp the market and would inevitably lead to shortages and market irregularities. This theory is general in its application to various types of goods and is relevant to what happens in the rental housing market under rent controls.

In a short-run situation under rent controls, the supply of housing with respect to price (rents) is quite inelastic. Because of the length of time required for new housing construction, it is just not possible to expand the supply of housing in the very short-run, regardless of the price offered. In a normally-operating market, then, a condition of excess demand will bid up housing prices in the short run. However, these price increases serve to stimulate additional construction so that eventually this extra demand is accommodated and the market comes into equilibrium again. But if the price of housing is artificially maintained below the equilibrium position that would have normally been reached under competitive conditions, a shortfall of housing supply soon develops. The rent controls have not permitted price increases, which, although unwanted, nevertheless provide the cue for additional construction.

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[*] Ira S. Lowry, Joseph S. Desalvo, and Barbara M. Woodfill, "Rental Housing in New York City: The Demand for Shelter," Volume II, R-649-NYC, the New York City Rand Institute, June 1971.

One analyst has attempted to determine the empirical relationship between rent controls and the rate of housing construction. The theory would suggest a negative relationship and this is indeed what was determined from the data collected. This study showed a correlation between a shorter span of rent control and a greater number of private housing starts. Additionally, those cities which decontrolled rents earliest also had the highest ratio of private to public housing construction. This author concluded that either rent controls made private housing construction less profitable or that the same political pressures that kept rent controls on also discouraged private housing construction.*

As a result of this shortfall in housing supply with no price mechanism to stimulate new construction, some non-price method of allocating the available housing comes into play. The consequence of this is that those who need housing may not be able to find such at any price. Even with additions made to the housing stock over time, a shortfall in supply is still highly probable. With prices artificially frozen there just is no mechanism present to equate supply and demand adequately.

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*Walter Block, "An Economic Analysis of Rent Control in The United States," Ph.D. Dissertation, Columbia University, 1971. Block analyzed 83 U.S. SMSA's from 1910-1960. Of them, 49 removed rent control prior to 1952, and 30 more removed them between 1952 and 1960.

When the rent controls are lifted, the theory would suggest a significant increase in prices before additions can be made to the housing stock in response to excess demand. In condition (1),* the market is operating under the restriction of rent controls. There is excess demand present as is indicated by the difference between demand curve for period one, D^1, and demand curve in period two, D^2. When controls are first lifted, the market is still operating on the short-run supply curve and the price is bid up to r_2. However, as the market begins to have time to respond to this increased demand, it begins to function along the long-run supply curve. Along the long-run curve, then, the additional housing supply thus provided leads to a lower equilibrium price, r_e.

Economic theory would suggest that rent controls are inappropriate as a long-run mechanism for holding down rent increases. Rent controls almost necessarily lead to housing shortages and other disruptions of the market, as well as ultimately higher rents. The policy implication here is that rent controls are not a particularly useful strategy in helping to support the effective demand of low-income families for housing.

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*See following page.

FIGURE 1

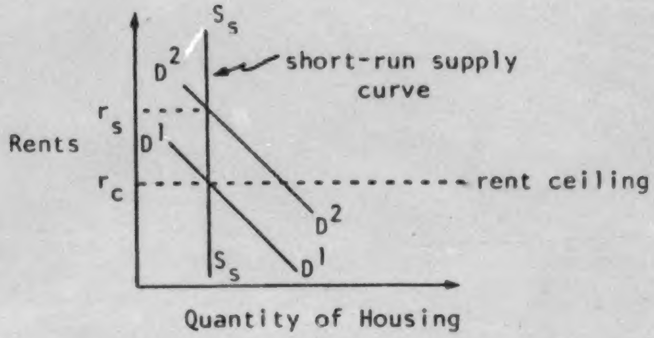


FIGURE 2

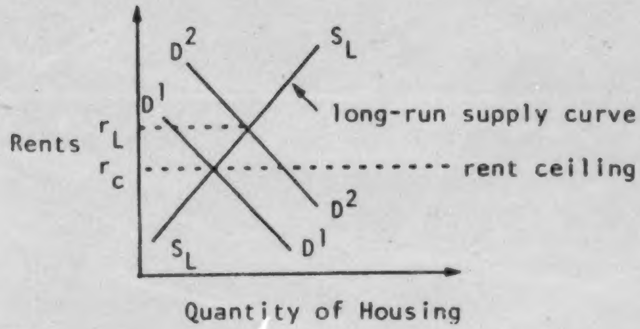
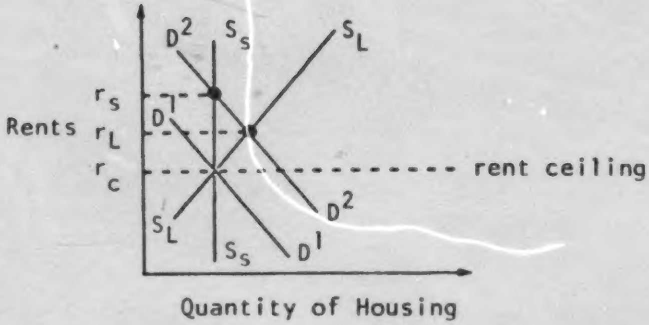


FIGURE 3



2. 'Active'

Of increasing interest lately is the suggestion of subsidizing poor people's housing consumption directly as opposed to subsidizing the producers on the supply-side of the market. This basic idea has been employed for some time in the distribution of welfare assistance. In fact, presently, the largest single direct subsidy that is applied to low income-housing may be that of welfare assistance.* HEW has estimated such aid at $4.6 billion in 1972, of which $2.6 billion was paid by the federal government--an amount equal to all of HUD's supply subsidies. Although welfare is normally distributed in lump-sum cash payments to eligible recipients, the amount that is dispersed depends upon some calculation of what the recipient ought to be paid for rent. It is very difficult to check how much welfare recipients are actually paid for rent, but Table 14 below lists how much each state allots for housing for its welfare clients, together with an estimate of the median rent for a standard housing unit in that state. Note how many states, particularly progressive Northern states, assume that the average welfare client must pay more than the median rental figure to acquire housing. Considering that the median renter-family in American currently earns about $7,000 a year, this would suggest

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*It has been claimed that the federal income tax deductions permitted homeowners are a "subsidy" to the middle classes. In strict economic terms they are, but the popular mind does not accept the notion that a lower tax rate is a boon. Actually the homeowner only receives part of the "subsidy"; the mortgagor is a beneficiary of interest deductions and local government is a beneficiary of property tax deductions. Henry J. Aaron (op. cit.) maintains that the failure of the federal government to tax the income that an owned house could earn if it was rented is also a "subsidy"; the same could be said of all personal property. Owned houses are consumption items, savings instruments, and hedges against inflation; they are rarely seen as investments. On this issue see HUD "Housing in the Seventies" pp. 2-9 - 2-14.

TABLE 14

WELFARE RENTS

	ALL RENTS*	MONTHLY WELFARE RENT ALLOWANCE	
		AFDC	OAA
ALA.	$ 60	$ 19	$ 40
ALAS.	191	n/a	145
ARIZ.	101	81	49
ARK.	63	35	35
CAL.	125	140	63
COLO.	108	69	45
CONN.	116	163	103
DEL.	101	63	66
D.C.	120	94	68
FLA.	106	81	50
GA.	79	46	40
HAWAII	138	157	59
IDA.	77	68	76
ILL.	119	97	97
IND.	92	100	100
IOWA	88	70	33
KAN.	82	125	125
KY.	75	52	23
LA.	70	22	35
ME.	79	115	43
MD.	121	41	41
MASS.	100	78	50
MICH.	108	145	145
MINN.	117	130	105
MISS.	62	50	50
MO.	83	40	40
MONT.	59	58	29
NEB.	86	100	100
NEV.	135	58	52
N.H.	88	85	70
N.J.	122	100	75
N.M.	79	47	37
N.Y.	104	105	75
N.C.	70	62	72
N.D.	89	72	62
OHIO	92	96	58
OKLA.	71	40	30
ORE.	95	54	42
PA.	81	86	65
R.I.	71	80	80
S.C.	65	40	35
S.D.	79	95	100
TENN.	71	33	33
TEX.	85	33	33
UTAH	88	75	36
VT.	84	104	104
VA.	108	95	95
WASH.	105	91	61
W. VA.	63	38	33
WIS.	102	130	130
WY.	79	100	65

*1970 MEDIAN CONTRACT RENT FOR UNITS WITH ALL PLUMBING PLUS 8.3% FOR CHANGE IN CONSUMER PRICE INDEX-RENT.

USBC HC(1)-A1-29;
MONTHLY LABOR REVIEW;
HUD, "HOUSING IN THE SEVENTIES" P.2-27

either that many welfare administrators believe that their clients should occupy housing equivalent to that of the upper half of the median rental scale or that they consider that the average non-welfare recipient is grossly underhoused.

As an extension of what has been done in these welfare cases, the concept of a government allowance to low-income families to be used for housing has gained a good deal of support, and extensive field experiments have been conducted. In fact, it was widely, although incorrectly, speculated that the President would announce in his September 17, 1973 Message to Congress that Federal housing policy for low-income families would seek to adopt some derivative of a housing allowance approach.

In general terms, a 'housing allowance' is a series of regular, periodic payments made to a housing-deprived individual or family so that the recipient household is able to afford "proper" housing without expending an inordinate percentage of its budget. The concept of a housing allowance, or for that matter a family allowance based on social welfare considerations, is not a novel development. The theory of a general family allowance was first employed in Europe in the nineteenth century to complement inadequate family income resulting from the industrial practice of gearing wages to worker productivity, with no regard for different levels of need.* Allowances specifically aimed at housing needs have been used as instruments of national economic and housing policy by Sweden and the United Kingdom for a number of years.

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*Daniel P. Moynihan, The Politics of a Guaranteed Income (New York, 1973).

Most economists would maintain that a general income-assistance plan, i.e., a general transfer of payments not tied to the consumption of any particular good, is the most efficient method of welfare assistance. The individual recipient is then able to make his own decisions about allocating money among different uses, thereby maximizing his own level of utility. However, the political realities are such that some restrictions must be placed on the use of public assistance. Although a recipient might be able to maximize his own level of utility through no expenditure controls, the point of maximal utility for the majority of society, which provides such aid, occurs when these assistance funds are used in accordance with the predominating 'middle-class' values for living standards. Therefore, although on a micro-level such an earmarked income transfer is not economically the most efficient, on a macro-level it is politically (given the preferences of the majority of Americans) the most viable. Thus, an economist might consider a housing allowance program, which is "in between" a donation of goods and an unrestricted cash grant, a reasonable "second-best" solution to the problem.

The actual form a housing allowance program could take depends upon the interaction of political forces which may be advocating two different, somewhat conflicting goals for the program. Such divergent policy aims would emphasize either (1) an implicit decrease in poverty through the reduction of high rent-to-income ratios; or (2) the elimination of the substandard housing stock in the country.

In other words, a housing allowance program can be designed as a mechanism for income redistribution among individuals and/or it can be used as a strategy to stimulate physical improvement of the housing stock in the United States.

This dichotomy closely parallels the transfer-in-kind versus unrestricted cash-grant controversy. If the subsidy is not earmarked specifcally for housing, the recipient will treat it as a cash grant, i.e., an income supplement, and probably not use the whole subsidy to improve his housing condition. The proponents of the transfer-in-kind philosophy believe that if each low-income recipient is required to use the entire subsidy on housing, then the vast majority of this nations's substandard housing units could well be eliminated.

Not surprisingly, there are two basic proposals for housing allowance formulae which reflect these two basic theoretical perspectives:

(1) The income redistribution, cash grant supporters favor the "housing gap" formula, under which an eligible family would get an allowance equal to the difference between the fair market rent (for a modest apartment matched to family size) and a specified percent of the family's income. Under such a plan there would be, at least in its "pure form," no requirement that the grant need be spent on housing. The rationale for this is that if a family is paying too high a proportion of its income for housing or is not living in standard housing, but still prefers to spend its housing subsidy on another good or service, it is the family's prerogative to do so. Thus, under the housing gap formula, the response without earmarking would be shaped by the income elasticity of demand for housing of the recipient households.

(2) The improve-the-housing-stock, transfer-in-kind advocates favor a "percentage-of-rent" formula, under which the recipient receives a grant

to cover a part of his rent, the percentage depending on recipient income. Since the subsidy depends on rent actually paid, there would be a strong incentive for the recipient household to use it to increase housing consumption. Although in theory, a family could choose to remain at its pre-subsidy level of housing expenditure and simply have the extra money available for other goods and services, it has been demonstrated that virtually all renting recipients would use the extra money for housing:

> Studies of the demand for housing suggest that on the average, and subject to a wide margin of statistical uncertainty, the income elasticity of demand is in the neighborhood of 1.0 and the price elasticity of demand is in the neighborhood of -1.0 for renter families. With these elasticities it turns out that all of the payments under the plan will serve to increase housing demand, at least for renter families.*

Thus, there is some evidence that a percentage-of-rent plan would improve the housing stock with very little if any spill-over effect into other areas of consumption.

Which formula will ultimately prevail, or whether a compromise between the two will be reached, will depend at least as much on the political strengths and weaknesses of their proponents as on the intrinsic merits of the two formulae.

Federal government experience with the construction subsidy programs suggests that the private market place might decide more efficiently where and how much housing to build. Government involvement in a non-construction housing program such as this would be limited, then, to its administration. In addition, the design of a housing allowance program would entail decisions about the following major policy issues:

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*Frank de Leeuw, The Design of a Housing Allowance, Urban Institute Paper #112-25, October 1970, p. 21.

(1) Whether the assistance would be paid in (a) cash or (b) redeemable certificates.

(2) Whether the allowance would be a function of (a) income, (b) family composition, or (c) actual rent paid;

(3) Whether the allowance would apply to (a) only low-income renters or (b) all low-income households; and

(4) Whether occupancy of a "standard" dwelling unit would be a condition precedent to receipt of a subsidy.

The choices made among these different alternatives will determine the degree to which the program would emphasize income redistribution versus housing stock improvement.

Additionally, the way in which the program tenets are carried out will have a large impact on the results of the program. Equity of treatment of families in the same basic financial circumstances, the participation rate of eligible families, and the level of spillover of subsidies to goods other than housing all depend to a great extent on how strictly the program is administered. The parameters of administrative concerns include:

(1) Certification of landlords (if rent certificates are used);

(2) Issuance and redemption procedures for rent certificates (again, if they are used);

(3) Inspection of units (if occupancy of standard housing is a prerequisite);

(4) Increased code enforcement and/or harsher penalties for violations;

(5) Determination of local rent variations as a basis for allowance rates (if the housing gap formula is employed); and

(6) Verification of applicants' income.

The more administrative restrictions and procedures which are established, the more the program would tend to lead to an improved housing stock and away from imparting income redistributive effects. But another consideration, though, is that the stricter the administration, the more sharply the program costs escalate. In examining the administrative issues relevant to the design of a housing allowance, it is well to bear in mind the HUD comment that

> [E]xperience with many federal programs clearly demonstrates that well-intentioned programs can be diverted from their objectives by inadequate guidelines, poor administration and planning, inappropriate funding levels, and administrative ineptitude or abuse.*

The following, then, are topics of crucial administrative concern:

(1) To what extent should the housing subsidy be earmarked specifically for housing? How should such earmarking be accomplished?

In the absence of earmarking, a household may receive an unrestricted income transfer which need not be spent on housing. Although this may not necessarily do anything to improve the housing stock, it would promote greater flexibility and self-determination, since each family could decide for itself exactly how much extra housing to purchase. Such a design would probably run into political difficulties. However, in a tight housing market, this issue would be virtually moot, since a family would probably have to pay the maximum subsidy to which it was entitled just to get decent housing.

Under an earmarking scheme, expenditures for increased housing services are assured, and it is to a family's benefit to pay a rent that is as close to the maximum as possible. This may provide a disincentive to shop wisely for housing, since any savings will not accure to the family. In this respect, an earmarking scheme could be less efficient than an unrestricted cash grant.

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*Robert Beckham, "The Experimental Housing Allowance Program," from Journal of Housing, January 1973, p. 12.

An issue raised by the housing economist de Leeuw is that "[T]he requirement of equal treatment of families in the same basic economic circumstances [i.e., equity] seems especially likely to conflict with a high degree of earmarking."* With a high degree of earmarking, less variance is possible in the use of the funds and hence differences in family needs are not as well respected. Thus the earmarking scheme is less equitable in this respect.

The higher the degree of earmarking, the more likely the program is, compared to an income redistribution program, to drive up rents. If the goal is to reduce the number of substandard units, this may not be such a high price to pay.

(2) Should the allowance apply to homeowners as well as to renters?

Extending the housing allowance to homeowners raises certain additional administrative issues. If such a policy is attempted, experience shows that it would be necessary to include assistance for down payments, closing costs, and moving expenses. Homeowners would also probably have to be reimbursed for mortgage tax, and insurance payments, and repair expenditures on their homes. Extending subsidies to homeowners raises equity and political problems as well, since it is likely that friction would arise between recipients and non-recipients who were in similar financial straits and also owned their own homes. A partial solution would be to arbitrarily cut off the allowances of households whose homes exceeded certain limits, regardless of family income.

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*De Leeuw, The Design of a Housing Allowance, op. cit., p. 4.

(3) How much verification of need should be required?

The questions of verification and certification involve a trade-off between administrative simplicity and the recipient's dignity on the one hand; and fiscal efficiency, obtained by low-error rates, on the other. The issue here is not easily decided, since the price of low-error rates is expensive, time-consuming checks at all stages of the administration of the program. If the federal government requires quality control checks, which set permissible error rates, it is unrealistic to expect a simplified declaration system to work. In the Kansas City, Missouri experiment with housing allowances, it was found that the simple declaration form produced a greater than permissible error rate. This was found to result not so much from "welfare chiseling" as from administrative foul-ups brought about by complex, contradictory regulations.

If the housing allowance program is to function according to its goals, an assessment has to be made comparing the costs and benefits of a design which condones a high-error rate as the price of simplified administration, and one which minimizes the number of errors through an expensive and elaborate verification process.

(4) How many people should participate in the program? Should the total projected number of participants be initiated into the program simultaneously or be phased in by groups over time? If the latter, how gradually should they be phased in, and using what criteria?

The number of participants is a function of the amount of money that will go to finance the program and the level of subsidy expected; therefore, the participation rate has important effects upon the resultant demand pressure exerted on the housing market.

If there are not enough funds for a deep and wide program, the obvious answer is to scale down the subsidy and/or eliminate some potential recipients. Some programs currently administered through H.E.W. and H.U.D. aim to screen out "loafers," "chiselers," childless couples, families with fathers present, etc.,as a way of reducing the target population and thus the cost of the program, in order to keep from reducing the subsidy levels of those who eventually succeed in becoming recipients. If, on the other hand, there are sufficient funds for a wide-scale program, there is no need to erect bariers to the subsidies.

The more slowly eligible recipients join the program, the less the pressure on the housing market, and the more time the filtering process and rehabilitative programs undertaken by landlords would have to work. In this way, phasing-in of eligible applicants could serve as an alternative to a rent ceiling as a way of dealing with what appears to some commentators to be the inevitability of inflated rents in response to a housing allowance program. However, before a workable phasing plan could be established, studies of the vacancy rates of the target areas would have to be undertaken on the local level, since the phasing's goals would be defeated if participants were phased in at a rate that exceeded the vacancy rate's capacity to accommodate them.

Phasing and eligibility are closely related, because with the passage of time, new categories of eligible applicants--for example, families with fathers present--could be defined, and benefit levels could be raised, permitting the very poor to participate. (The very poor could not afford to join the program at presently-discussed subsidy levels because even those levels would require too great a financial base for involvement.) Examples of special-need categories that could be phased in to expand eligibility include households in substandard housing (which raises equity problems, since they may not be the poorest); households in areas requiring demolition; and households identified as "deserving," e.g., families facing intense housing discrimination based on race and households containing a large proportion of dependents.

It should be reemphasized that the principal determinant of the number of participants in any federal program is the level of funding authorized by the Congress and executed by the President. Historically, the Congress has been very tight with budget funds when it has come time to finance subsidized housing programs for the poor. In addition, Presidential impoundment of funds now has to be considered in regard to such program funding.

(5) How deep should the subsidy be? How much of their own income should recipients be required to spend?

A low subsidy level may restrict participation to the less needy, possibly reinforcing already-present landlord biases against welfare recipients. Moreover, a low level of benefits contributes to an inadequate market demand situation for housing, and thus to a cycle of disinvestment and abandonment of older and relatively obsolete units.* As a result, sympathetic administrators of the program may adjust the definition of standard housing to encompass what is in reality less-than-standard housing, so that more families can participate. This would then sabotage one of the primary objectives of the program.

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*"Program Description: Shelter Component in Federal-State Categorical Public Assistance Programs," The Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, June 15, 1973.

If the subsidy level is deep enough, on the other hand, it might stimulate landlords of presently-substandard units to upgrade them. This could make strict code enforcement more palatable to those who presently fear that such enforcement will only result in the eviction of families from substandard housing without providing alternatives within their price range. However, if the subsidy is still deeper, so that the household can afford not only to live in standard housing, but also to obtain the housing services (e.g., schools, access to jobs, and/or crime-free neighborhoods) it wants, the program is bound to cause resentment among non-recipients who cannot afford such a housing package. In addition to this equity problem, such deep subsidies are a temptation to landlords to raise rents without raising housing services proportionately. If the program's objective is to encourage families to spend some of their own income on rent, a deep subsidy level will discourage such spending, since some families will prefer to forego "extra" housing services in order to save the extra money or spend it on goods other than housing.

(6) Should there be a requirement that the housing allowance be used only for standard housing? If so, how should this requirement be enforced?

Such a requirement would be established if the objective of the housing allowance program is primarily to improve the housing stock, rather than to reduce poverty. However, some families eligible for the program may have significant problems locating such housing. Thus, the higher the housing standard required to receive the subsidy, the more otherwise-eligible households will be eliminated. This requirement, then, is another way to limit participation, with the dubious advantage of not appearing intentionally to do so, but rather to support the laudable goal of improving the housing stock.

Enforcing this requirement also requires auxiliary administration, and inspections and reinspections of units are expensive. The cost could be reduced by coordinating the inspections with an already existing municipal program to license and inspect housing units, though not all municipalities have such inspection programs.

(7) What supportive services would have to be provided?

Lack of money is not the only reason people live in substandard housing or pay too much for housing services. That the poor often need the advice and advocacy of concerned administrators was the finding of the Task Force that reviewed the Housing Improvement Program of Hartford, Connecticut (HIPH) for the Department of Health, Education, and Welfare.* These services would raise the cost of a housing allowance program, but they might make the critical difference in its success or failure.

Services that might be helpful to allowance recipients include the provision of security deposits and finders' fees. Guarantees by the welfare department to pay back rent or utility arrearages, even to those landlords who do not require them, would be an incentive to landlords to accept welfare tenants.

The housing needs of the elderly and especially of large families are most often neglected by normal market processes and would require special supportive services, either to encourage construction for these special categories, or to search for existing housing for them. Finally, it has been suggested that a federally sanctioned rent-withholding program might help to redress the imbalances presently existing in the housing market, particularly where the "stick" (withholding of rent) is complemented by the "carrot" of welfare recipients who are fully backed by their welfare departments and who have sufficient funds to promote the maintenance of standard housing.

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*The Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, "Task 8: Analysis of Deliberate Efforts to Improve Housing Conditions," Contract #H-1876 for HUD.

(8) On what basis should eligibility rest? How should eligibility be verified?

Obviously the central criterion for eligibility is income. But how should net income be calculated? What expenses should be permissible deductions? As de Leeuw points out, the federal government doesn't have a uniform policy on this point: welfare programs disregard the first $30 plus 1/3 of income, public housing and income tax permit one lump sum deduction for each dependent, and the Section 236 program uses another formula.*

Should the definition of net income take into account or exclude income from other transfer programs? Most welfare programs exclude such income, but the legislation creating the Food Stamp program specifically requires inclusion. Thus participation in the housing allowance program would automatically result in lower Food Stamp subsidies for participants in both programs.

What are allowable assets? Should recipients be required to verge on bankruptcy before being permitted to receive a housing subsidy? Perhaps the household, and society as a whole, would be better off without an extreme dissavings requirement.

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*De Leeuw, Design of a Housing Allowance, op. cit.

The administrative mechanism for verifying eligibility that would be the least costly would be to coordinate the housing allowance program with the Internal Revenue Service and other federal transfer programs. Social Security, for example, has an accurate record of the earnings of all persons registered with that Administration.

D. Hypothesized Program Costs and Benefits

The bulk of the economic inefficiencies in the previously discussed supply-side subsidy strategies is related to the fact that the government has been involved as a middleman in the process of assuring an adequate housing supply to low-income families. One of the major benefits believed to accompany a housing allowance plan is elimination of this middleman role in the construction business.

At this stage it would be impossible to do an efficiency analysis of the housing allowance program for three reasons: 1) Obviously no figures are in yet on the results, since the program has not been in effect nationally. 2) The estimates of the costs vary greatly among the commentators. 3) It is very difficult to put a dollar value on certain results. Henry J. Aaron, in a statement before the U.S. Joint Economic Committee estimated that "a modest universal housing allowance of the income-gap variety, with an asset test, would have cost from $4.9 billion to $6.2 billion in 1967, depending on the impact of the allowance on housing costs." (See Table 15.) In defense of this subsidy, Aaron points out that tax benefits to homeowners, through exclusion of net imputed rent and deduction of mortgage interest and property tax totalled $10 billion in 1971.* Since these tax benefits do not accrue to low-income families, a $5 or $6 billion subsidy would not be inequitable, he argues. De Leeuw estimates the annual cost at $7.4-$9.5 billion per year, based on 13-17 million families.* Heinberg, also at the Urban Institute, disagrees, estimating the transfer cost at $5-$7 billion annually for the same number of recipients.**

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*Henry J. Aaron, "Federal Housing Subsidies: History, Problems, and Alternatives," statement prepared for the Hearings on Federal Housing Subsidies and Housing Policy of the U.S. Joint Economic Committee, December 5, 1972, p. 4.

TABLE 15

PROJECTED ANNUAL COST AND NUMBER OF BENEFICIARIES UNDER HOUSING ASSISTANCE PLAN, BY COVERAGE AND HOUSING COSTS, 1967

	COST OF PLAN (BILLIONS OF DOLLARS)		NUMBER OF BENEFICIARIES (MILLIONS OF HOUSEHOLDS)	
	STABLE HOUSING COSTS	HOUSING COSTS RISE 10 PERCENT	STABLE HOUSING COSTS	HOUSING COSTS RISE 10 PERCENT
Universal	4.9	6.2	12.3	14.1
All families and all persons 65 and over	3.7	4.8	8.2	9.7
Families with children and all persons 65 and over	3.2	4.1	6.8	8.0
All families and all persons 65 and over, except homeowners without mortgages	3.2	4.1	6.9	8.0

Source: Henry J. Aaron, Shelter and Subsidies.

The housing allowance program operates in such a way that benefits to recipients are directly proportional to government costs. If costs are reduced by requiring families to pay a high percentage of income, and/or if subsidies decrease rapidly as income or housing expenditures rise, recipient satisfaction will be lower than if the government provides a fairly deep subsidy that requires a complementary smaller percentage of family income. The only factor that would reduce efficiency, regardless of the subsidy rate, is the cost of administration; the tighter the administration, the more the administrative cost, although such factors as rent voucher exchange posts, code enforcement, eligibility checks, and rent ceiling enforcement would all add to the program's political viability, and a rent ceiling would in some ways promote efficiency by keeping down costs in the short-run. However, if a rent ceiling were established, some measures designed to stimulate construction would seem to be necessary to increase the supply of housing and hence reduce the bulge in housing costs when the ceiling is removed.

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*De Leeuw, quoted in Journal of Housing, January 1973, p. 16.

**John D. Heinberg, The Transfer Cost of a Housing Allowance, an Urban Institute paper, p. 82.

The basic difference in impact between the 'old' construction programs and the new housing allowance plan is that the construction strategy means deep subsidies for a few and no assistance for the many, whereas housing allowances involve a more modest subsidy which can be spread over more families. Even assuming that stringent eligibility requirements are imposed in the administration of a housing allowance, this latter form of subsidy should reach many times the number of families presently assisted by public housing, although some formulas would not effectively reach the poorest families.

For there to be completely equal treatment of all people who are in similar economic situations ("horizontal equity"), people who own and rent would have to be treated equally, as would dwellers in standard and substandard units. As de Leeuw points out, such an equity requirement would substantially raise the costs of the program.* Moreover, for there to be horizontal equity across cities, recipients in cities with high housing costs would require more generous subsidies.

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*De Leeuw, "The Distribution of Housing Services," op. cit., p. 77.

There is horizontal inequity when a program results in unequal treatment of welfare and non-welfare families of equal income. In some cases the level of financial assistance to large families, or to those with other unusual circumstances, may be greater than levels of income for fully-employed unskilled workers. This creates a disincentive to work.* One solution is either to tax transfer income or to provide work-related expense deductions. Another possible solution is to keep the level of amenities subsidized by the government at a slightly lower level than a non-welfare, working family would be able to afford. Aaron makes a very cogent comment directed to this point:

> While limitations based on other criteria than measurable need dilute equity, limited resources might compel policy makers to curtail eligibility. Ideally such limitations should not be based on criteria subject to control by potential beneficiaries; for example, a household that owned its residence free-and-clear could easily mortgage its house if the making of mortgage payments were a condition for benefits.**

One further point about equity needs to be stressed. Financial aid alone cannot bring about equitable treatment of blacks and other racial minorities. Vigorous enforcement of Title VIII of the Civil Rights Act would have to accompany a housing allowance program.

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*David M. Austin, "Working Paper on Alternative Public Assistance Income Provision Policies and Their Significance for Housing Consumption," The MIT-Harvard Joint Center for Urban Studies, January 1973.

**Aaron, Shelter and Subsidies, op. cit., p. 169.

E. Some Observations on Federal Low-Income Housing Policies

As this section should show, government activities at least partially intended to aid low-income families with their housing problems cover a fairly broad spectrum. In this study we have briefly examined nine of the more relevant government programs and/or policies and they are listed in summary fashion below:

'Passive' Strategies, Supply-Side Emphasis
- local zoning, building and housing codes
- 'trickle-down'
- reduced housing construction costs

'Active' Strategies, Supply-Side
- public housing
- Section 221(d)(3) program
- Section 235 program
- Section 236 program

'Passive,' Demand-Side Emphasis
- rent controls

'Active,' Demand-Side
- housing allowances

Keeping in mind that most of these strategies were not intended just for low-income housing relief nor were they ever funded at levels concomitant with housing needs, we can compare how well they address the underlying problems which are thought to lead to the poor's ill-housing. The theories which have been proposed to explain the poor housing of low-income families are, briefly, these:

(1) The poor may be confined to an inelastic supply of old housing;

(2) Greedy slumlords use monopolistic powers to gain exorbitant rents from slum tenants;

(3) The poor primarily rent their dwellings, and this leads to limited concern about the condition of their dwelling units;

(4) Externalities in the slum create and reinforce a cycle of systematic undermaintenance of buildings;

(5) Institutional factors in the economy and housing industry artificially keep housing construction costs too high; and

(6) The poor lack the financial means to adequately compete in the private market for housing.

In the following chart, we express our basicly subjective judgments about the relative successes of the various programs mentioned earlier in aiding low-income families. These judgments are based on the program descriptions and discussions presented before. The chart presents the conclusions of the author in such a manner that some overall perspective can be attained.

GOVERNMENT PROGRAMS AND/OR POLICIES	THEORIES ABOUT LOW-INCOME HOUSING PROBLEMS*					
	1	2	3	4	5	6
Local zoning, building, and housing codes	--	na	na	+	-	-
Speeding up 'trickle-down'	+	+	na	0	0	0
Reducing housing costs	0	na	0	0	+	0
The Public Housing Program	+	na	na	+	na	+
The Section 235 Program	++	na	na	+	0	+
The Section 236 Program	++	na	na	+	0	+
Rent Controls	na	+	na	-	0	+
Housing allowances	++	0	na	++	0	++

*The numbers on the theories refer to numbering system used above.

KEY: na = not applicable
++ = the program has been, or potentially is, very important in the resolution of the problem
+ = the program has been, or potentially is, helpful in the resolution of this problem
0 = has had no real effect on the problem, although it should have had
- = the program has exacerbated the problem
-- = the program has significantly exacerbated the problem

The principal insight to be gained from this chart is of a general nature: 'passive' market intervention by the government is probably less effective for dealing with the problems of low-income housing than is an 'active' market involvement. Additionally, we suggest that the demand-side of the housing market may be a more advantageous focus for government interest and subsidization than is the supply-side. While these observations may seem somewhat obvious or even trivial, they should not be lost sight of when discussing the proper government role.

F. The Current Status of Federal Housing Programs

The role of the government in the provision of housing aid has been remarkably stable over the years, and changes in government programs for such aid have been largely incremental in nature. As opposed to other industrialized countries (Britain, for example), there have been no major shifts in the government's strategies toward housing. New housing legislation has primarily been an extension of past legislation, with modifications to better relate the policies to current social and political norms. This process has been criticized for leading to an administrative nightmare, but, by and large, these policies and programs have led to (or at least accompanied) remarkable--and sustained--improvements in the nation's housing stock. Nevertheless, the basic role of government in housing for low-income families now may need some re-thinking. Much theoretical discussion has recently been directed to the question of whether the supply-side or the demand-side of the housing market is the more appropriate location of government involvement. We have already offered our view that the demand-side may be the more advantageous location for government subsidies. This is also the view of most housing economists, and it is roughly the view taken by the Nixon Administration for low-income housing. The U.S. Department of Housing and Urban Development has become disenchanted with the use of the subsidized construction programs (especially Sections 235 and 236) and is now conducting experiments in the use of housing allowances as a way to upgrade the poor's housing quality.

Unfortunately, the manner in which this reformulation and possible change in government programming is being carried out is extremely disadvantageous to the poor. With the freeze on new commitments under the Section 235 and 236 programs, a major source of housing assistance to low-income families has been abruptly side-tracked. While the discontinuance of these programs might not be so bad if there were some alternative to them, there has thus far been nothing provided to make up for this loss of housing aid.

Improving housing conditions and facilitating the access of the poor to better housing is at best an incremental process. First, it is just not feasible to add tremendous amounts of new housing to the available stock of housing in a year without significantly warping the overall economy. Thus, new construction is not a quick or easy remedy. On the other hand, merely supporting the demand of the low-income family for better housing cannot work in the short-run because the supply of housing is largely inelastic in that time period. Thus, there is no such clear and simple solution to this problem as HUD seems currently to be striving to devise.

We suggest that a debate about the appropriateness of supply-side subsidies versus demand-side subsidies is not particularly useful. In the end, probably some combination of the two strategies will be needed, depending on the housing market conditions in particular areas. In many large metropolitan areas, the vacancy rate for available rental units is so low that it would be proper for the government to step in and stimulate the supply-side of the market. In these areas, housing allowances to low-income families would do little to improve their housing quality and would probably just lead to rapid rent increases. However, many of the smaller metropolitan areas in the country are not so hard pressed for available units. In these cases, supporting the effective demand for housing would be more appropriate than stimulating additional construction.

Temporarily, more commitments under Sections 235 and 236 should be authorized for low-vacancy areas. Given the length of time needed for construction and the disequilibrium caused in the construction industry by the freeze, a more steady flow of government subsidized construction activity is desirable. This renewed construction activity should then be accompanied by tighter administration, which, after the freeze episode, should now be feasible, and by increased efforts by HUD to use subsidized construction and subsidized demand in a more complementary fashion.

Appendix A

Comments on the 1970 Housing Census

By
Barry Bruce-Briggs

Because the principal source of data for this analysis is the U.S. Census, it may be useful to make some technical remarks about its utility. Currently it is fashionable to sneer at the Census, pointing out its errors and unreliability. To be sure, these criticisms are justified, but are to a large degree irrelevant if the Census material is used with a modest amount of prudence. The U.S. Census of Housing is an unparalleled source of information on the housing of Americans. It is an imprecise instrument because of many factors: many people have been missed, people have lied to the census enumerators; the census enumerators themselves have lied by inventing data rather than gathering them, the enumerators have made serious errors of judgment, census definitions have been changed making comparisons difficult; different samples have been used for different data and the numbers within the census are internally inconsistent. I accounted for these problems in several ways: all numbers were rounded to thousands, all numbers were considered to be accurate only within ten percent, and comparative figures were not taken seriously unless the differences between them were 20 percent or more. And since for the most part we are dealing in millions of units, a difference of plus or minus 10 percent does not make an awful lot of difference, at least for our purposes here.

Here it may be useful to explain the use of certain terminology in the Census. The division of the terms "standard" and "dilapidated" is so highly unreliable that it is practically worthless. In 1950 census enumerators were instructed to classify housing as "sound" or "dilapidated," in 1960 an intermediate category "deteriorating" was added. It was found after the 1960 Census that the normal enumerator was unable to consistently or properly classify units according to their structural conditions. (I had occasion to survey areas five years after the census and found that one could tell which enumerators had classified various areas--in general, enumerators had shown distinct class and racial biases in rating the homes of working-class people and black people worse than more prosperous whites.) In 1970 the Census relied upon a formula for estimated dilapidation which perhaps leaves as much to be desired as the enumerators' evaluation. For example, USBC estimates correlate dilapidation with black occupancy; if this formula is maintained, blacks will always be judged to have worse housing than whites. So any data which quote deteriorating units or substandard units should be taken with several tons of salt.

The Census divides the country into urban location according to this formula: "Central cities" are defined as cities of 50,000 or more and "metropolitan areas" are defined as the counties which those central cities are in as well as counties which have a close economic relationship with that central city. I use the term "rest metro" to describe the remainder of metropolitan areas. These areas are sometimes described as "suburbs" which is true of most of them but there are also large rural areas and even wilderness (such as the Mohave Desert) and also some rather significant large old cities (e.g., Yonkers, Camden, Cambridge) within metropolitan areas. The remainder of the country is "non-metropolitan"--I will use the term "non-metro." This includes most of the rural areas of the country and small towns and villages. In 1970:

Central Cities	64	(31%)
Rest Metro	76	(37%)
Total Metro	139	
Non-Metro	64	(31%)
Nation	203	Millions

As a rough shorthand it is useful to think of the nation as one-third central cities, one-third rest metro, and one-third non-metro.

"Urban" is central cities, adjoining territory with a population density of 1,000 per square mile or more, and incorporated municipalities with population of more than 2,500; "rural" is the remainder of the nation. In 1970:

Urban	--	149 Million
Rural	--	54 Million

The Census also divides the country into "regions." "Northeast" is Pennsylvania and all states north and east of it; "North Central" is more or less the mid-west being everything from Ohio to Kansas and north of that. "West" is Montana, Wyoming, Colorado, New Mexico and states west. "South" is the states from Delaware to Texas and south--all the former slave states except Missouri. As shown on Table A-1 there is a great similarity between non-South regions in housing and income; therefore I shall group "Northeast," "North-central" and "West" together as "North" and treat "South" separately. The sizes of these regions in 1970 were:

Table A-1 REGIONAL COMPARISON, 1970

	NORTHEAST	NORTH CENTRAL	WEST	SOUTH	U.S.
MEDIAN FAMILY INCOME	$10,454	$10,115	$10,228	$ 8,079	$ 9,590
MEDIAN HOUSE VALUE	$19,500	$16,700	$20,600	$13,600	$17,100
MEDIAN RENT	$ 111	$ 110	$ 120	$ 93	$ 108
% POOR	10.1%	10.8%	11.7%	20.3%	13.7%
WHITE	8.6%	9.4%	10.6%	14.6%	10.9%
BLACK	24.3%	25.4%	25.0%	44.0%	35.0%

VARIOUS USBC SOURCES

Northeast	49	(24%)
North Central	57	(28%)
West	35	(17%)
North	140	(69%)
South	63	(31%)
Nation	203	Millions

It is useful to think of "South" as about one-third of the United States.

A few other technical terms may be useful: a "housing unit" is a single-family house, row house, apartment, mobile home, which constitutes a separate unit. The "household" is the people who occupy a housing unit. About 3 percent of the American population does not live in housing units, but rather in group quarters, i.e. barracks, hospitals, nursing homes, dormitories, etc. Since these people are not poor or if poor presumably have somebody who is supposed to be taking care of them, I shall not consider them in this analysis.

In racial definitions, the Census uses the sensible method of defining people's race by what they call themselves or what they are commonly known as in the community (i.e. what the census enumerator thinks they are). Aggregate data until 1960 separated out "non-white" which is mostly Negro, particularly in the big cities and rural south which I shall emphasize in this analysis. Nineteen seventy data separate out "black" data. Since blacks are slightly less well-housed than aggregate non-whites (because the latter includes lots of orientals who are better housed than blacks) data which show an improvement between non-whites in 1960 and blacks in 1970 actually understate the improvement for blacks.

In the data presented, most absolute figures have been rounded to thousands and percentages rounded to units. Because of this (and doubtless some trivial arithmetic errors) totals will not add up exactly.

All citations are from the 1970 Census of Housing, unless otherwise noted. "USBC" is U.S. Bureau of the Census; "HC" indicates a Census of Housing publication. Most heavily used have been:

HC(2)-1	Metropolitan Housing Characteristics
HC(4)-1	Components of Inventory Change

In most cases, I have regrouped Census data and made calculations from them, so the numbers in the tables will often not be found in the same form as in the cited source.

Appendix B

A Statistical Description of Housing, 1970

By
Ronald D. Westby

TABLE 1

POST-WAR CHANGES IN HOUSING QUALITY
(MILLIONS)

	1950	1960	1970
ALL OCCUPIED UNITS	42.9	53.3	64.2
ALL PLUMBING	27.5	45.2	59.7
LACKING PLUMBING	14.2 (34.0%)	7.8 (14.7%)	3.8 (5.9%)
NOT DILAPIDATED	39.1	51.3	61.9
DILAPIDATED	3.9 (9.1%)	2.0 (3.8%)	2.3* (3.6%)
STANDARD	27.7	44.8	59.5
SUBSTANDARD	15.2 (35.5%)	8.5 (15.9%)	4.7 (7.4%)
NOT CROWDED	36.3	47.0	59.2
CROWDED	6.6 (15.4%)	6.2 (11.7%)	4.7 (7.3%)

*USBC ESTIMATE

VARIOUS USBC SOURCES

TABLE 2

HOUSING CONDITIONS BY URBAN LOCATION (THOUSANDS)

	1960		1970	
CENTRAL CITIES				
OCCUPIED UNITS	19,635		21,170	
LACKING PLUMBING	1,725	(8.8%)	501	(2.3%)
SUBSTANDARD	2,031	(10.3%)	1,092	(5.2%)
CROWDED	2,139	(10.9%)	1,531	(7.2%)
REST METRO				
OCCUPIED UNITS	16,155		22,559	
LACKING PLUMBING	1,161	(7.2%)	453	(2.0%)
SUBSTANDARD	1,346	(8.3%)	771	(3.4%)
CROWDED	1,687	(10.4%)	1,498	(6.6%)
NON-METRO				
OCCUPIED UNITS	17,477		20,164	
LACKING PLUMBING	4,972	(28.4%)	2,352	(11.7%)
SUBSTANDARD	5,100	(29.2%)	2,879	(14.3%)
CROWDED	2,431	(13.9%)	1,700	(8.4%)

USBC HC(4)-17 & 18

TABLE 3

NO HEATING
(THOUSANDS UNITS)

	1960	1970
CENTRAL CITIES	305	211
REST OF METRO	296	217
NON-METRO	511	211
NORTH	712	428
SOUTH	399	211
NATIONAL	1,111	639

USBC HC(4)-1-18

TABLE 4

SUBSTANDARD UNITS BY REGION, 1960-70

	1960	1970
NORTHEAST		
CENTRAL CITIES	512	382
REST METRO	272	215
NON-METRO	416	261
TOTAL	1,109	858
NORTH CENTRAL		
CENTRAL CITIES	590	267
REST METRO	380	192
NON-METRO	1,387	558
TOTAL	4,360	1,022
WEST		
CENTRAL CITIES	234	148
REST METRO	165	131
NON-METRO	374	152
TOTAL	652	431
SOUTH		
CENTRAL CITIES	695	294
REST METRO	517	231
NON-METRO	3,124	1,706
TOTAL	4,337	2,431

USBC HC(4)-1

TABLE 5

HOUSING OCCUPIED BY THE OFFICIAL POOR, 1969
(THOUSANDS OF UNITS)

	ALL RACES	WHITE	NEGRO	OTHER NON-WHITE	SPANISH SPEAKING
NATION					
OWNED	3,327 (42%)	2,739 (45%)	551 (30%)	37 (32%)	151 (32%)
RENTED	4,641	3,293	1,269	79	322
TOTAL	7,969	6,032	1,821	115	473
WITH INADEQUATE PLUMBING	1,193 (15%)	705 (8%)	459 (25%)	30 (26%)	70 (15%)
SOUTH					
OWNED	1,316 (45%)	930 (51%)	384 (37%)	4	58
RENTED	1,584	917	658	8	79
TOTAL	2,899	1,846	1,042	12	137
WITH INADEQUATE PLUMBING	641 (22%)	286 (15%)	359 (34%)	-	25
NORTH					
OWNED	2,011 (40%)	1,809 (43%)	167 (21%)	33	93
RENTED	3,057	2,376	611	71	243
TOTAL	5,070	4,186	779	103	336
WITH INADEQUATE PLUMBING	552 (11%)	419 (10%)	100 (13%)	30	45

OEO, "POVERTY IN AMERICA, 1969"

NOTE: DOES NOT INCLUDE UNITS ON LOTS OF 10 ACRES; THEREFORE RURAL DATA IS INCOMPLETE.

TABLE 6

HOUSING OF THE POOR, 1970

	OCCUPIED UNITS	(% OWNED)	INADEQUATE PLUMBING	(%)
URBAN				
WHITE	4,471	(39%)	306	(7%)
BLACK	1,489	(26%)	221	(15%)
OTHER	80	(20%)	9	(11%)
SPANISH SPEAKING	414	(28%)	45	(11%)
ALL	6,040	(35%)	536	(9%)
RURAL NON-FARM				
WHITE	1,471	(64%)	370	(25%)
BLACK	307	(51%)	219	(71%)
OTHER	32	(56%)	18	(56%)
SPANISH SPEAKING	55	(58%)	23	(42%)
ALL	1,810	(62%)	608	(34%)
RURAL FARM				
WHITE	90	(71%)	29	(32%)
BLACK	26	(50%)	19	(73%)
OTHER	3	-	2	-
SPANISH SPEAKING	4	-	2	-
ALL	118	(67%)	50	(44%)

NOTE: DOES NOT INCLUDE UNITS ON LOTS OF 10 ACRES, THEREFORE RURAL DATA IS INCOMPLETE

OEO, "POVERTY IN AMERICA, 1969"

TABLE 7

RURAL HOUSING, 1970

	ALL OCCUPIED UNITS	POOR HOUSE-HOLDS	LACKING PLUMBING	NON-POOR HOUSE-HOLDS	LACKING PLUMBING
NORTH	11,989	1,815	322 (18%)	10,174	531 (5%)
WHITE	11,892	1,785	312 (17%)	10,107	522 (5%)
BLACK	97	30	10	67	9
SOUTH	8,236	2,187	902 (41%)	6,049	769 (13%)
WHITE	7,075	1,565	474 (30%)	5,510	506 (9%)
BLACK	1,161	622	428 (69%)	539	263 (48%)
NATION	20,225	4,002	1,224 (31%)	16,223	1,300 (8%)
WHITE	18,987	3,350	786 (23%)	15,617	1,028 (7%)
BLACK	1,258	652	438 (67%)	606	272 (45%)

U.S. DEPT. OF AGRICULTURE
RURAL DEVELOPMENT SERVICE
STATISTICAL BULLETIN #520
(1973)

TABLE 8

LOW-INCOME HOUSING COMPARISON

'69 INCOME ($000)	% OWNED	% WITH INADEQUATE PLUMBING
$ 0-2	49%	17%
2-3	51	12
3-4	50	11
4-5	50	8
0-5	50	13
"OFFICIAL POOR"	42	15
NATION	62	6

USBC HC(2)-1-6; OEO
"POVERTY IN AMERICA-1969"

TABLE 9

NATIONAL HOUSING CONDITIONS

OWNER-OCCUPIED UNITS

1969 INCOME ($000)	WITH ALL PLUMBING UNCROWDED	WITH ALL PLUMBING CROWDED	LACKING PLUMBING SOME CROWDED	TOTAL
$ 0-2	3.124 (83%)	64 (2%)	586 (16%)	3,775
2-3	1,700 (87%)	42 (2%)	206 (11%)	1,949
3-4	1,609 (88%)	63 (3%)	162 (9%)	1,835
4-5	1,555 (88%)	84 (5%)	132 (7%)	1,771
5-6	1,685 (88%)	118 (6%)	118 (6%)	1,921
6-7	1,814 (88%)	146 (7%)	97 (5%)	2,057
7-10	6,567 (90%)	572 (8%)	191 (3%)	7,330
10-15	9,541 (92%)	747 (7%)	116 (1%)	10,404
15-25	6,342 (94%)	378 (6%)	42 (1%)	6,762
25 +	2,003 (96%)	70 (3%)	10 (-)	2,083
	35.939	2,284	1.662	39,886

RENTER OCCUPIED UNITS

1969 INCOME ($000)	WITH ALL PLUMBING UNCROWDED	WITH ALL PLUMBING CROWDED	LACKING PLUMBING SOME CROWDED	TOTAL
$ 0-2	2,992 (77%)	195 (5%)	705 (18%)	3,892
2-3	1,497 (80%)	123 (7%)	257 (14%)	1,877
3-4	1,438 (79%)	168 (9%)	209 (12%)	1,815
4-5	1,409 (81%)	180 (10%)	162 (9%)	1,750
5-6	1,516 (82%)	198 (11%)	133 (7%)	1,847
6-7	1,518 (84%)	195 (11%)	102 (6%)	1,814
7-10	3,960 (86%)	486 (11%)	174 (4%)	4,620
10-15	3,476 (88%)	372 (9%)	80 (2%)	3,928
15-25	1,477 (90%)	135 (8%)	22 (1%)	1,634
25 +	350 (92%)	25 (7%)	6 (2%)	381
	19,634	2.077	1,849	23,560

ALL OCCUPIED UNITS

1969 INCOME ($000)	WITH ALL PLUMBING UNCROWDED	WITH ALL PLUMBING CROWDED	LACKING PLUMBING SOME CROWDED	TOTAL
$ 0-2	6,116 (80%)	259 (3%)	1,291 (17%)	7,667
2-3	3,197 (84%)	165 (4%)	463 (12%)	3,826
3-4	3,047 (83%)	231 (6%)	371 (11%)	3,650
4-5	2,964 (84%)	264 (7%)	294 (8%)	3.521
5-6	3,201 (85%)	316 (8%)	251 (7%)	3,768
6-7	3.332 (86%)	341 (9%)	199 (5%)	3,871
7-10	10.527 (88%)	1,058 (9%)	365 (3%)	11,950
10-15	13,017 (91%)	1.119 (8%)	196 (1%)	14,332
15-25	7,819 (93%)	513 (6%)	64 (1%)	8,396
25 +	2,353 (95%)	95 (4%)	16 (1%)	2,464
	55.573	4.361	3.511	63,446

USBC HC(2)-1-6

TABLE 10

INCOME & HOUSING INSUFFICIENCY
(THOUSANDS OF UNITS)

1969 INCOME ($000)	ALL PLUMBING OVERCROWDED			LACKING PLUMBING, SOME OVERCROWDED			ALL
	OWNED	RENTED	TOTAL	OWNED	RENTED	TOTAL	TOTAL
$ 0-2	64	195	259	587	705	1,292	1,551
2-3	42	123	165	206	257	463	628
3-4	63	169	232	162	209	371	603
4-5	84	180	264	132	161	293	557
5-6	118	198	316	118	133	251	567
6-7	146	195	341	97	102	199	540
7-10	573	486	1,059	191	174	365	1,424
10 +	1,194	531	1,725	169	108	277	2,002
$ 0-5,000			920			2,419	3,339
5-10,000			1,716			815	2,531
10,000 +			1,725			277	2,002
ALL INCOMES	2,284	2,077	4,361	1,662	1,849	3,511	7,872

USBC HC(2)-1-6

TABLE 11

CROWDING
(UNITS OCCUPIED AT MORE THAN
ONE PERSON PER ROOM)

	OCCUPIED UNITS	% OVERCROWDED
NATIONAL	63,450	8.2%
URBAN	47,563	7.6
RURAL	15,887	10.1
CENTRAL CITIES	21,382	8.5
REST METRO	22,481	7.1
NON-METRO	19,587	9.2
NORTH	44,192	7.3
SOUTH	19,258	10.3
WHITE	57,270	6.9
BLACK	6,180	19.9

HC(1)-A1-10 & 34

TABLE 12

OVERCROWDED UNITS BY LOCATION

	1960	1970
NORTH		
CENTRAL CITIES	1,444 (9.8%)	1,030 (6.7%)
REST METRO	1,200 (9.2%)	1,118 (6.4%)
NON-METRO	1,048 (10.4%)	764 (6.7%)
SOUTH		
CENTRAL CITIES	695 (13.9%)	501 (8.8%)
REST METRO	487 (15.4%)	380 (7.4%)
NON-METRO	1,383 (18.7%)	936 (10.7%)
NATION	6,257 (11.7%)	4,728 (7.4%)

HC(4)-1-1

TABLE 13

CROWDING BY INCOME LEVEL 1970

	OCCUPIED AT MORE THAN ONE PERSON PER ROOM	(% OF ALL UNITS)
0-2	392	(5%)
2-3	254	(7%)
3-4	325	(9%)
4-5	345	(10%)
5-6	387	(10%)
6-7	396	(10%)
7-10	1,163	(10%)
10-15	1,172	(8%)
15-25	530	(6%)
25 OR MORE	98	(4%)

USBC HC(2)-1-6

TABLE 14

OCCUPANCY-LOWER INCOME HOUSING 1970

PERSONS/UNIT	0-$3,000	3-$5,000
1	5611	1825
2	3416	2772
3	1028	1024
4	613	620
5	352	384
6 OR MORE	473	544
CHILDREN/UNIT		
0	9327	4939
1	759	817
2	565	574
3	370	360
4	219	223
5 OR MORE	250	258

USBC HC(S1)-12

TABLE 15

CROWDING BY INCOME GROUPS

HOUSEHOLD INCOME GROUPS (APPROXIMATE)	1950	1960	1970
LOWER THIRD OF UNITS	17%	12%	8%
MIDDLE THIRD "	17	14	10
UPPER THIRD "	10	9	7

FRIEDEN, OP. CIT.;
USBC HC(2)-1-6

TABLE 16

FINANCIAL CHARACTERISTICS

OWNER-OCCUPIED

'69 INCOME ($000)	ALL UNITS	UNITS WITH FINANCIAL DATA PUBLISHED	NO FINANCIAL DATA	MOBILE HOMES	ALL OTHERS
$ 0-2	3,775	2,640	1,135	215	920
2-3	1,949	1,361	588	119	469
3-4	1,835	1,291	544	122	422
4-5	1,771	1,258	513	127	386
5-6	1,921	1,371	550	147	403
6-7	2,057	1,514	543	151	392
7-10	7,330	5,774	1,556	422	1,134
10-15	10,404	8,787	1,617	340	1,277
15-25	6,762	5,918	844	95	749
25+	2,083	1,813	270	14	256
TOTAL	39,886	31,726	8,160	1,752	6,408

RENTER-OCCUPIED

'69 INCOME ($000)	ALL UNITS	UNITS WITH FINANCIAL DATA PUBLISHED	NO FINANCIAL DATA	MOBILE HOMES	ALL OTHERS
$ 0-2	3,892	3,664	228	62	166
2-3	1,877	1,765	112	32	80
3-4	1,815	1,703	112	34	78
4-5	1,750	1,646	104	32	72
5-6	1,847	1,740	107	32	75
6-7	1,814	1,718	96	28	68
7-10	4,620	4,398	222	57	165
10-15	3,928	3,763	165	33	132
15-25	1,634	1,571	63	9	74
25+	381	364	17	2	15
TOTAL	23,560	22,334	1,226	321	905

HC(2)-1-4-3,4,6, & 8

TABLE 17

GROSS RENT AS % OF INCOME

	CENTRAL CITIES		REST METRO	
	1960	1970	1960	1970
LESS THAN 20%	4661 (46%)	4592 (43%)	2030 (48%)	2786 (44%)
20-25%	1452 (14%)	1508 (14%)	605 (14%)	878 (14%)
25-35%	1403 (14%)	1619 (15%)	575 (14%)	910 (15%)
35% OR MORE	1945 (19%)	2632 (24%)	672 (16%)	1315 (21%)
NOT COMPUTED	564 (6%)	383 (4%)	339 (8%)	373 (6%)
TOTAL	10025	10735	4220	6263

	NON-METRO		U.S.	
	1960	1970	1960	1970
LESS THAN 20%	1804 (42%)	2296 (45%)	8495 (45%)	9676 (44%)
20-25%	497 (12%)	594 (12%)	2555 (14%)	2980 (13%)
25-35%	563 (13%)	669 (13%)	254 (14%)	3199 (14%)
35% OR MORE	722 (17%)	951 (18%)	3339 (18%)	4989 (23%)
NOT COMPUTED	718 (17%)	647 (13%)	1620 (9%)	1403 (6%)
TOTAL	4300	5115	18550	22150

HC(4)-1-21

TABLE 18

RENT-INCOME RELATIONSHIPS--NORTHERN CENTRAL CITIES

	NORTHEAST		NORTH CENTRAL	
	1960	1970	1960	1970
-20%	1,933 (54%)	1,646 (45%)	1,169 (45%)	1,088 (42%)
20-25%	466 (13%)	472 (13%)	400 (15%)	344 (13%)
25-35%	459 (13%)	517 (14%)	348 (13%)	386 (15%)
35% OR MORE	591 (16%)	867 (24%)	524 (20%)	676 (26%)
NOT COMPUTED	150 (4%)	120 (3%)	160 (6%)	81 (3%)
TOTAL UNITS	3,599	3,623	2,600	2,575

HC(4)-1-26 & 31

TABLE 19

LOWER-INCOME RENTER HOUSEHOLD COMPOSITION, 1969
RENT/INCOME RATIO

	0-25%	25-35%	35% OR MORE	*	TOTAL
HUSBAND-WIFE, NO BOARDERS					
UNDER 25 YEARS	131 (20%)	152 (23%)	323 (49%)	49	656
25-34	110 (23%)	101 (21%)	195 (41%)	56	472
35-44	73 (27%)	53 (20%)	103 (39%)	38	266
45-64	133 (27%)	95 (19%)	187 (38%)	74	488
65 & OVER	117 (19%)	129 (21%)	283 (41%)	78	606
OTHER MALE HEAD					
UNDER 65	47 (12%)	46 (12%)	254 (65%)	46	393
65 & OVER	12 (17%)	11 (15%)	39 (54%)	11	72
FEMALE HEAD					
UNDER 65	221 (13%)	284 (17%)	1,011 (59%)	201	1,716
65 & OVER	33 (15%)	34 (16%)	118 (55%)	28	213
SINGLE					
UNDER 65	361 (18%)	336 (17%)	1,035 (52%)	248	1,979
65 & OVER	171 (9%)	260 (14%)	1,247 (65%)	240	1,918
ALL GROUPS	1,417 (16%)	1,501 (17%)	4,793 (55%)	1,067	8,778

*NOT TABULATED

HC(2)-1-9

TABLE 20

PERSONAL CONSUMPTION: EXPENDITURES FOR HOUSING

	1950	1955	1960	1965	1970
CURRENT DOLLARS (BILLIONS)	21.3	33.3	46.2	63.5	90.9
CONSTANT '58 $ (BILLIONS)	26.5	36.6	44.7	57.7	67.2
PER CAPITA (BILLIONS '58 $)	$174	$222	$248	$298	$330
PER HOUSEHOLD (BILLIONS '58$)	588	738	827	987	1,045
% OF ALL CONSUMPTION	11.1	13.3	14.2	14.7	14.7

1973 STATISTICAL ABSTRACT

TABLE 21

VALUE OF OWNER-OCCUPIED HOUSING

VALUE-INCOME RATIO	CENTRAL CITIES 1960	CENTRAL CITIES 1970	REST METRO 1960	REST METRO 1970	NON-METRO 1960	NON-METRO 1970	NATION 1960	NATION 1970
LESS THAN 2.0	4,293 (45%)	4,777 (46%)	4,673 (40%)	6,964 (43%)	4,225 (35%)	5,281 (37%)	13,181 (40%)	17,021 (42%)
2.0-3.0	1,857 (19%)	1,823 (18%)	3,000 (26%)	3,600 (22%)	1,527 (13%)	1,947 (14%)	6,384 (19%)	7,371 (18%)
3.0-4.0	668 (7%)	727 (7%)	960 (8%)	1,280 (8%)	746 (6%)	928 (7%)	2,375 (7%)	2,935 (7%)
4.0 OR MORE	1,193 (12%)	1,359 (13%)	1,383 (12%)	1,973 (12%)	1,371 (11%)	1,562 (11%)	3,946 (12%)	4,894 (12%)
NOT COMPUTED	(17%)	(16%)	(14%)	(15%)	(35%)	(31%)	(22%)	(21%)
TOTAL	9,633	10,432	11,688	16,088	11,990	14,175	33,310	40,684

USBC HC(4)-1-20 & 21

TABLE 22

OWNER-OCCUPIED HOUSEHOLDS HEADED BY PERSONS 65 & OVER

1969 INCOME	OLD HEAD	NON-OLD HEAD	TOTAL
$ 0-2,000	2.339	1,436	3.775
2-3,000	1.213	736	1,949
3-4,000	912	923	1,835
4-5,000	695	1,076	1,771
5-6,000	534	1,387	1,921
6-7,000	430	1,627	2,057
7-10,000	880	6,450	7,330
10-15,000	729	9,675	10,404
15-25,000	426	6,336	6,762
25,000 +	203	1,880	2,083
0-5,000	5.159	4,171	9,300
5-10,000	1.844	5,464	11,308
10,000 +	1.358	17,891	19,249
TOTAL	8.362	31,524	39,886

USBC HC(2)-1-9

TABLE 23

NON-FARM MORTGAGES

	1960	1970
NO MORTGAGE	40%	42%
MORTGAGE	60%	58%
MEDIAN ANNUAL PAYMENT (CURRENT $)	$ 876	$1,284
MEDIAN ANNUAL PAYMENT ($1970)	$1,149	$1,284
MEDIAN ANNUAL PAYMENT AS % OF MEDIAN FAMILY INCOME	23%	13%

G. KATONA ET AL.
1970 SURVEY OF CONSUMER
FINANCES U. OF MICHIGAN
INSTITUTE FOR SOCIAL
RESEARCH, 1971.

TABLE 24

NON-FARM MORTGAGES BY INCOME

1969 INCOME	NO MORTGAGE	MORTGAGE	MEDIAN MONTHLY PAYMENT
$ 0-3,000	86%	14%	$ 50-74
3-5,000	80%	20%	$ 50-74
ALL	42%	58%	$100-124

IBID.

TABLE 25

MORTGAGE PAYMENTS--NON-FARM FAMILIES

	ANNUAL INCOME		
	0-$3,000	$3-5,000	ALL FAMILIES
NO MORTGAGE	86%	80%	26%
ANNUAL MORTGAGE	14	20	75
-$300	1	2	1
$300- 600	3	4	3
$600- 900	6	8	9
$900-1,200	3	4	12
$1,200-1,500	*	2	12
$1,500-1,800	*	*	7
$1,800 OR MORE	1	*	14
			100

IBID. P.45

TABLE 26

SUMMARY OF NON-FARM HOUSING

1969 INCOME	RENT	OWNED. NO MORTGAGE	OWNED. MORTGAGE	OTHER (MOBILE HOMES, ETC.)
$ 0-3,000	45%	37%	6%	12%
3-5,000	44%	37%	9%	10%
ALL	31%	26%	36%	7%

IBID.

TABLE 27

CORRELATIONS BETWEEN INCOME AND HOUSING COST

ANNUAL INCOME ('69)	OWN HOUSES WORTH: $20-35,000	OWN HOUSES WORTH: $35,000 OR MORE	PAY ANNUAL RENTS OF: $1,800-2,400	PAY ANNUAL RENTS OF: $2,400 OR MORE
$0-2,000	159,368	79,201	242,938	102,265
2-3,000	166,485	33,215	120,060	38,343
3-4,000	181,494	32,875	141,484	40,490
4-5,000	213,456	32,706	155,532	42,736

USBC HC(2)-1-1-2

TABLE 28

LOWER-INCOME OWNERSHIP OF SECOND HOMES

'69 INCOME ($THOUSANDS)	ALL UNITS (THOUSANDS)	OWNED (THOU.)
$0-2	216	129
2-3	110	71
3-4	113	74
4-5	113	75
0-5	552	349
5 +	2,338	
TOTAL	2,890	
(BLACK	138)	

USBC HC(S1)-13

TABLE 29

VALUE-INCOME RATIOS OF OWNER-OCCUPIED HOUSING HEADED BY PERSONS 65 AND OVER

VALUE/INCOME	OLD HEAD	NON-OLD HEAD	TOTAL
-2.0	1,825	16,495	18,320
2.0-3.0	1,105	5,352	6,457
3.0-4.0	795	1,639	2,434
4.0 +	2,315	1,900	4,215
NOT COMPILED	98	202	300
TOTAL	6,136	25,590	31,726

USBC HC(2)-1-9

TABLE 30

RENT/INCOME RATIOS HOUSEHOLDS HEADED BY PERSONS 65 OR OLDER

<table>
<tr><th>1969 INCOME*</th><th>0-20%</th><th>20-25%</th><th>25-35%</th><th>35%+</th><th>NOT COMPUTED</th><th>TOTAL</th></tr>
<tr><td>$ 0-5</td><td>153 (5%)</td><td>180 (6%)</td><td>434 (15%)</td><td>1,687 (60%)</td><td>357 (13%)</td><td>2,811</td></tr>
<tr><td>5-10</td><td>313</td><td>121</td><td>123</td><td>54</td><td>42</td><td>653</td></tr>
<tr><td>10 +</td><td>317</td><td>27</td><td colspan="2">←——21——→</td><td>20*</td><td>385</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td>3,849</td></tr>
</table>

*($ THOUSANDS)

USBC HC(2)-1-9

TABLE 31

AGE-RACIAL COMPARISON, OWNED HOUSING

'69 INCOME ($ THOUSANDS)	WHITE	OVER 65	BLACK	OVER 65	TOTAL
$0-2	3,318	2,103 (64%)	457	236 (52%)	3,775
2-3	1,755	1,019 (58%)	194	83 (43%)	1,949
3-4	1,651	863 (52%)	184	49 (22%)	1,835
4-5	1,596	658 (41%)	175	37 (21%)	1,771

USBC HC(2)-1-9

TABLE 32

RENTAL UNITS--SUMMARY OF DEFICIENCIES

	LACKING PLUMBING	ALL PLUMBING OVERCROWDED	ALL PLUMBING, NOT CROWDED, OVERPRICED	O.K.	TOTAL
BLACK	634 (18%)	584 (16%)	1,073-1,223 (30-34%)	1,167-1,317 (32-37%)	3,607
WHITE	1,215 (6%)	1,494 (7%)	5,961-7,181 (30-36%)	10,063-11,283 (50-57%)	19,953
U.S.	1,849 (8%)	2,077 (9%)	7,034-8,404 (30-36%)	11,230-12,600 (48-53%)	23,560

HC(2)-1-6 & 15

TABLE 33

ESTIMATES OF DEFICIENCIES IN LOW-INCOME HOUSING

Rental Housing		
Lacking plumbing	1,333	(18%)
All plumbing, overcrowded	666	(9%)
	2,000	(27%)
All plumbing, not crowded overpriced (absolute minimum number)	4,292+	(59+%)
	6,292	(86+%)
Owned Housing		
Lacking plumbing	1,087	(12%)
All plumbing, crowded	253	(3%)
All plumbing, not crowded, overpriced (crude minimum)	1,100?	(12+%)
	1,430	(27+%)

TABLE 34

CHANGES IN CONDITION 1960-70

	1970 CONDITION		
1960 CONDITION	ALL PLUMBING	LACKING PLUMBING	VACANT
ALL PLUMBING	38,833	344	1,939
LACKING PLUMBING	2,696	2,182	848
VACANT	2,099	194	1,434
	STANDARD	SUBSTANDARD	VACANT
STANDARD	37,622	849	1,877
SUBSTANDARD	2,681	2,508	
VACANT	1,962	311	1,434

HC(4)-1-272

TABLE 35

UNITS REMOVED FROM HOUSING STOCK 1960-1970
(THOUSANDS)

ALL UNITS	6,144
OCCUPIED UNITS	5,024
VACANT	1,119
OWNED	1,848
RENTED	3,176
WHITE OCCUPIED	4,104
BLACK OCCUPIED	919
SOUTH	2,305
NORTH	2,719
STANDARD OCCUPIED	3,001
SUBSTANDARD OCCUPIED	2,023
CROWDED	1,023
NOT CROWDED	3,999

USBC HC(4)-1-167

TABLE 36

UNITS BUILT BEFORE 1940

	1960	1970	
CENTRAL CITIES	12,849	10,583	- 2,266 (18%)
REST METRO	6,734	6,145	- 589 (9%)
NON-METRO	10,637	9,334	- 1,303 (12%)
NATION	30,220	26,062	- 4,158 (16%)

USBC HC(4)-1-18

TABLE 37

MEDIAN GROSS RENTS, BY RACE, 1960

INCOME IN 1959	ALL HOUSEHOLDS	NONWHITE HOUSEHOLDS	NONWHITE/ALL HOUSEHOLD COMPARISON
less than $2,000	$ 53	$47	.887
$ 2,000-2,999	61	55	.902
3,000-3,999	66	61	.924
4,000-4,999	71	66	.929
5,000-5,999	76	70	.933
6,000-6,999	80	72	.900
7,000-7,999	84	75	.867
8,000-9,999	89	75	.867
10,000-14,999	99	81	.818
15,000 and up	118	not given	___

Compiled from United States Census of Housing, 1960; Metropolitan Housing HC(2), No. 2-10.

TABLE 38

MEDIAN GROSS RENTS, BY RACE, 1970

1969 INCOME ($000)	ALL HOUSEHOLDS	BLACK HOUSEHOLDS	BLACK/ALL HOUSEHOLD RATIO
$ 0-2	$ 79	$ 70	.886
2-3	85	77	.906
3-4	91	82	.901
4-5	96	87	.906
5-6	102	92	.902
6-7	106	97	.915
7-10	115	103	.896
10-15	133	115	.865
15-25	160	129	.806
25 OR MORE	202	121	.599

Source: USBC, 1970, HC(2)-1,13.

TABLE 39

INCOME & MEDIAN RENTS, 1970

1969 INCOME ($000)	U.S.	CENTRAL CITIES	(BLACK)	REST METRO	NON-METRO
$ 0-2	$ 79	$ 83	($77)	$ 97	$ 60
2-3	85	88	(83)	101	69
3-4	91	94	(88)	109	74
4-5	96	98	(92)	113	79
5-6	102	103	(96)	117	83
6-7	106	107	(99)	121	88
7-10	115	114	(105)	130	96
10-15	133	129	(115)	148	110
15-25	160	153	(128)	174	130
25+	202	207	(172)	217	137
TOTAL UNITS	22,300	11,000		6,400	4,900

HC(2)-1-4,38,55,72

TABLE 40

MEDIAN RENT/INCOME RATIOS, 1960

MONTHLY GROSS RENT	MEDIAN RENT/ INCOME RATIO		NONWHITE/TOTAL RATIO
	TOTAL	NONWHITE	
Less than $30	19.8	22.3	1.126
$30-$39	20.8	24.2	1.163
$40-$49	19.6	24.3	1.239
$50-$59	19.0	23.9	1.258
$60-$69	19.2	24.8	1.292
$70-$79	19.8	24.8	1.252
$80-$99	20.4	26.2	1.284
$100-$119	21.8	28.1	1.289
$120 and over	22.1	29.4	1.330
Totals	20.0	26.1	1.305

Source: "Price Discrimination Against Negroes in the Rental Housing Market," by Chester Rapkin. Compiled from 1960 Census of Housing.

TABLE 41

MEDIAN RENT/INCOME RATIOS, 1970

MEDIAN MONTHLY GROSS RENT	MEDIAN RENT/ INCOME RATIO		BLACK/TOTAL RATIO
	TOTAL	BLACK	
less than $50	21.4	22.5	1.051
50 to 59	21.3	23.4	1.099
60 to 69	20.4	23.2	1.137
70 to 79	18.9	23.2	1.228
80 to 99	18.7	22.5	1.203
100 to 119	20.1	23.1	1.149
120 to 149	21.4	26.4	1.234
150 to 199	22.2	27.5	1.239
200 to 299	23.5	32.2	1.370
more than $300	25.7	35 +	1.362
Totals	22.1	25.5	1.154

Source: USBC, 1970, HC(2)-3,8.

TABLE 42

PERCENT OF INCOME PAID FOR RENT, 1970

1969 INCOME ($000)		-15%-	15%-19%	20%-24%	25%-35%	35%+	NOT COMPILED
$0-2	TOTAL	← 1% →		1%	5%	72%	21%
	BLACK	1	1	2	7	69	21
2-3	T	2%	4%	7%	18%	63%	6%
	B	3	6	9	21	56	5
3-4	T	5%	8%	13%	28%	40%	6%
	B	8	11	15	30	31	5
4-5	T	8%	14%	19%	30%	23%	6%
	B	13	18	21	30	15	4
5-6	T	13%	21%	22%	26%	12%	6%
	B	18	25	24	23	6	4
6-7	T	19%	26%	21%	21%	6%	6%
	B	26	31	22	16	2	4
7-10	T	34%	29%	19%	11%	2%	5%
	B	45	30	15	6	1	3
10-15	T	56%	26%	9%	← 4% →		4%
	B	73	19	4	← 1% →		3
15-25	T	78%	13%	3%	← 1% →		4%
	B	91	5	← 1 →			2
25 +	T	88%	5%	1%	← 1% →		4%
	B	96	← 1 →				3

USBC, 1970, HC(2)-1-5.

TABLE 43

GROSS RENT BY RACE

	TOTAL	BLACK
less than $40	3.1%	7.2%
$ 40-59	7.7	12.5
60-79	13.7	18.5
80-99	16.6	19.9
100-149	31.8	29.0
150-199	14.8	7.1
200 and up	6.5	1.5
no cash rent	5.8	4.4
	100.0%	100.0% of black renting households

Source: Housing Characteristics for States, Cities, and Counties, Volume I, 1970; Part I, United States Summary.

TABLE 44

RACIAL COMPARISON--RENTAL UNITS

NATION

'69 INCOME ($000)	ALL PLUMBING		LACKING PLUMBING		
	UNCROWDED	CROWDED	UNCROWDED	CROWDED	TOTAL
$ 0-2	2,991 (77%)	196 (5%)	612 (16%)	93 (2%)	3,892
2-3	1,497 (80%)	123 (7%)	198 (11%)	59 (3%)	1,877
3-4	1,438 (79%)	168 (9%)	149 (8%)	60 (3%)	1,815
4-5	1,409 (81%)	180 (10%)	113 (6%)	49 (3%)	1,750
5-6	1,516 (82%)	198 (11%)	93 (5%)	40 (2%)	1,847
6-7	1,519 (84%)	194 (11%)	72 (4%)	30 (2%)	1,814
7-10	3,960 (86%)	486 (11%)	122 (3%)	52 (1%)	4,620
10-15	3,476 (88%)	372 (11%)	55 (1%)	25 (1%)	3,928
15-25	1,477 (90%)	135 (8%)	14 (1%)	7 (-)	1,634
25+	351 (92%)	25 (7%)	4 (1%)	2 (1%)	381
TOTAL	21,711		1,848		23,560
MEDIAN	$6,700		$2,900		$6,300

BLACK

'69 INCOME ($000)	ALL PLUMBING		LACKING PLUMBING		
	UNCROWDED	CROWDED	UNCROWDED	CROWDED	TOTAL
$ 0-2	576 (62%)	84 (9%)	210 (23%)	56 (6%)	926
2-3	256 (64%)	52 (13%)	61 (16%)	34 (8%)	403
3-4	234 (62%)	65 (17%)	46 (12%)	33 (9%)	378
4-5	210 (64%)	61 (19%)	31 (9%)	26 (8%)	328
5-6	203 (67%)	60 (20%)	22 (7%)	19 (6%)	305
6-7	184 (69%)	53 (20%)	15 (6%)	14 (5%)	266
7-10	385 (71%)	12 (21%)	23 (4%)	22 (4%)	541
10-15	256 (74%)	72 (21%)	7 (2%)	9 (3%)	345
15-25	75 (74%)	22 (22%)	1 (1%)	2 (2%)	101
25+	11 (73%)	3 (20%)	- (3%)	1 (4%)	15
TOTAL	2,973		634		3,607
MEDIAN	$4,800		$2,500		$4,300

USBC, 1970, HC(2)-1,15.

TABLE 45

BLACK SOUTH

'69 INCOME ($000)	ALL PLUMBING		LACKING PLUMBING		
	UNCROWDED	CROWDED	UNCROWDED	CROWDED	TOTAL
$ 0-2	246 (47%)	45 (9%)	179 (34%)	53 (10%)	522
2-3	96 (46%)	30 (14%)	49 (23%)	33 (16%)	209
3-4	93 (49%)	34 (17%)	37 (19%)	32 (16%)	196
4-5	79 (49%)	32 (20%)	23 (14%)	25 (16%)	160
5-6	70 (52%)	30 (22%)	16 (12%)	18 (13%)	134
6-7	59 (56%)	24 (23%)	11 (10%)	13 (12%)	106
7-10	113 (59%)	46 (24%)	15 (8%)	19 (10%)	192
10-15	65 (64%)	25 (25%)	4 (4%)	8 (8%)	102
15-25	16 (67%)	6 (23%)	- (2%)	2 (7%)	25
25+	3 (59%)	1 (24%)	- (7%)	- (10%)	5
TOTAL	1,114		536		1,650
MEDIAN	$4,100		$2,400		$3,500

BLACK NORTH

'69 INCOME ($000)	ALL PLUMBING		LACKING PLUMBING		
	UNCROWDED	CROWDED	UNCROWDED	CROWDED	TOTAL
$ 0-2	330 (82%)	39 (10%)	31 (8%)	3 (1%)	404
2-3	160 (82%)	22 (11%)	12 (6%)	1 (1%)	194
3-4	141 (77%)	31 (17%)	9 (5%)	1 (1%)	182
4-5	131 (78%)	29 (17%)	8 (5%)	1 (1%)	168
5-6	133 (78%)	30 (18%)	6 (4%)	1 (1%)	171
6-7	125 (78%)	29 (18%)	4 (3%)	1 (1%)	160
7-10	272 (78%)	66 (19%)	8 (2%)	3 (1%)	349
10-15	191 (79%)	47 (19%)	3 (1%)	1 (-)	243
15-25	59 (78%)	16 (21%)	1 (1%)	0 (-)	76
25+	8	2	0 (-)	1 (-)	10
TOTAL	$1,859		$98		$1,957

USBC, 1970, HC(2)-1-6, 15, 279

TABLE 46

RACIAL COMPARISON--OWNED UNITS

NATION

'69 INCOME ($000)	ALL PLUMBING		LACKING PLUMBING		
	UNCROWDED	CROWDED	UNCROWDED	CROWDED	TOTAL
$ 0-2	3,124 (83%)	64 (2%)	547 (14%)	40 (1%)	3,775
2-3	1,700 (87%)	42 (2%)	176 (9%)	30 (2%)	1,949
3-4	1,609 (88%)	63 (3%)	129 (7%)	34 (2%)	1,835
4-5	1,555 (88%)	84 (5%)	100 (6%)	42 (2%)	1,771
5-6	1,685 (88%)	118 (6%)	88 (5%)	30 (2%)	1,921
6-7	1,814 (88%)	146 (7%)	71 (3%)	26 (1%)	2,057
7-10	6,567 (90%)	572 (8%)	140 (2%)	42 (1%)	7,330
10-15	9,541 (92%)	747 (7%)	87 (1%)	29 (-)	10,404
15-25	6,342 (94%)	378 (6%)	33 (-)	9 (-)	6,762
25+	2,003 (96%)	70 (3%)	9 (-)	2 (-)	2,083
TOTAL	38,224		1,662		39,886
MEDIAN	$10,000		$3,200		$9,700

BLACK

'69 INCOME ($000)	ALL PLUMBING		LACKING PLUMBING		
	UNCROWDED	CROWDED	UNCROWDED	CROWDED	TOTAL
$ 0-2	292 (64%)	17 (4%)	134 (29%)	15 (3%)	457
2-3	132 (68%)	13 (7%)	38 (20%)	11 (6%)	194
3-4	126 (68%)	18 (10%)	28 (15%)	13 (7%)	184
4-5	121 (69%)	21 (12%)	20 (11%)	12 (7%)	175
5-6	125 (71%)	26 (15%)	16 (9%)	10 (6%)	177
6-7	128 (73%)	27 (15%)	12 (7%)	8 (5%)	176
7-10	365 (77%)	77 (16%)	18 (4%)	15 (3%)	474
10-15	376 (82%)	70 (15%)	8 (2%)	8 (2%)	461
15-25	198 (85%)	32 (14%)	2 (1%)	2 (1%)	234
25+	30 (85%)	5 (13%)	-- (1%)	-- (1%)	35
TOTAL	2,198		369		2,560
MEDIAN	$ 7,400		$2,700		$6,500

USBC, 1970, HC(2)-1,6.

TABLE 47

RACIAL TENURE--OWNER-OCCUPIED HOUSING MEDIAN VALUE

1969 INCOME ($000)	NATIONAL ALL RACES	 NEGRO HEAD OF HOUSEHOLD	SOUTH ALL RACES	 NEGRO HEAD
$ 0-2	$ 9,600	$ 6,600	$ 7,400	$ 5,900
2-3	10,500	7,300	8,400	6,500
3-4	11,100	8,000	9,000	7,100
4-5	11,700	8,700	9,700	7,700
5-6	12,200	9,400	10,400	8,400
6-7	12,900	10,200	11,100	9,200
7-10	14,800	11,600	12,600	10,400
10-15	18,600	14,300	16,200	12,400
15-25	23,900	17,800	22,200	16,300
25 OR MORE	37,200	21,000	34,900	18,200
ALL HOUSEHOLDS	$17,100	$10,700	$13,600	$8,600

USBC, 1970, HC(2)-1-3, 12, 267, 276

TABLE 48

MEDIAN VALUE OWNER-OCCUPIED HOUSING--PROSPEROUS GROUPS

	1969 INCOME ($000) $10-15	 $15-25	 $25 & MORE
NORTHEAST - ALL	$19,900	$25,100	$39,700
" - NEGRO	14,000	18,600	23,400
NORTH CENTRAL - ALL	18,200	22,600	34,500
" - NEGRO	14,700	17,000	19,400
WEST - ALL	21,100	26,400	40,100
" - NEGRO	18,900	22,300	29,400
SOUTH - ALL	16,200	22,200	34,900
" - NEGRO	12,400	16,300	18,200
NATIONAL - ALL	18,600	23,900	37,200
" - NEGRO	14,300	17,800	21,000

USBC, 1970, HC(2)-1

TABLE 49

MEDIAN NUMBER OF ROOMS, 1960 AND 1970

MONTHLY GROSS RENT, 1960	MEDIAN NUMBER OF ROOMS		NONWHITE/TOTAL RATIO
	TOTAL	NONWHITE	
less than $30	2.4	2.2	.916
$30-$39	2.7	2.4	.889
$40-$49	3.1	2.6	.838
$50-$59	3.4	3.0	.882
$60-$69	3.6	3.2	.889
$70-$79	3.8	3.4	.895
$80-$89	4.1	3.7	.902
$100-$119	4.3	4.1	.953
$120 and over	4.6	4.7	1.022
Totals	3.8	3.2	.842

Source: "Price Discrimination Against Negroes in the Rental Housing Market," by Chester Rapkin. Compiled from 1960 Census of Housing.

MEDIAN MONTHLY GROSS RENT, 1970	MEDIAN NUMBER OF ROOMS		BLACK/TOTAL RATIO
	TOTAL	BLACK	
less than $50	3.2	3.4	1.063
50 to 59	3.4	3.5	1.029
60 to 69	3.5	3.6	1.029
70 to 79	3.7	3.8	1.027
80 to 99	3.8	3.9	1.026
100 to 119	4.0	4.2	1.050
120 to 149	4.1	4.4	1.073
150 to 199	4.2	4.8	1.143
200 to 299	4.6	5.2	1.130
more than $300	5.0	5.2	1.040
Totals	3.9	4.0	1.025

Source: USBC, 1970, HC(2).

TABLE 50

INDICATORS OF HOUSING QUALITY, BY RACE, 1960

MONTHLY GROSS RENT	PERCENT SUBSTANDARD		PERCENT WITH MORE THAN ONE PERSON PER ROOM	
	TOTAL	NONWHITE	TOTAL	NONWHITE
Less than $30	50.3	62.1	17.3	25.8
$30-$39	42.9	56.3	16.5	28.5
$40-$49	36.8	50.9	17.3	29.2
$50-$59	29.3	44.5	17.0	30.0
$60-$69	23.2	39.1	16.5	29.9
$70-$79	17.8	33.9	14.5	28.3
$80-$99	12.9	30.6	12.7	27.9
$100-$119	8.6	27.4	11.2	27.9
$120 and over	4.5	23.9	7.8	25.7
Totals	20.7	41.2	14.0	28.5

Source: "Price Discrimination Against Negroes in the Rental Housing Market," by Chester Rapkin. Compiled from 1960 Census of Housing.

INDICATORS OF HOUSING QUALITY, BY RACE, 1970

MEDIAN MONTHLY GROSS RENT	PERCENT NO PLUMBING*		PERCENT CROWDED**	
	TOTAL	BLACK	TOTAL	BLACK
less than $50	41.4	51.5	13.7	23.0
50 to 59	18.6	25.5	12.2	22.2
60 to 69	11.5	15.9	11.9	21.3
70 to 79	5.7	8.5	11.8	21.4
80 to 99	3.1	4.7	11.4	20.8
100 to 119	1.6	2.6	10.9	20.6
120 to 149	1.0	1.8	8.8	19.2
150 to 199	.6	1.4	7.2	18.8
200 to 299	.6	2.1	6.1	20.3
more than $300	.8	5.6	3.5	17.0
Totals	6.6	14.5	10.1	21.1

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*Percent No Plumbing: Listed in Census as "Lacking some or all plumbing."

**Percent Crowded: Figures used for units with 1.01 or more persons per room.

Source: Compiled from 1970 Census of Housing, Metropolitan Housing Characteristics, HC(2)-1.

TABLE 51

NATIONAL CHANGES IN STOCK 1960-70
(in 000's of units)

	WHITE OCCUPIED	BLACK OCCUPIED	TOTAL
1960 OCCUPIED UNITS	48,487	4,808	53,295
LOSSES			
DEMOLITIONS	2,484	642	3,127
MERGERS	431	41	472
OTHER	1,620	277	1,897
TOTAL	- 4,535	- 960	- 5,496
(% OF 1960 UNITS)	(9%)	(20%)	(10%)
GAINS			
NEW CONSTRUCTION	14,792	973	15,766
CONVERSIONS	401	137	538
OTHER	534	76	610
TOTAL	+15,727	+1,186	+16,914
(% OF 1970 UNITS)	(27%)	(19%)	(26%)
TRANSFERS			
WHITE TO BLACK	- 1,623	+1,623	-
BLACK TO WHITE	+ 219	- 219	-
TOTAL	- 1,404	+1,404	
(% OF 1960 UNITS)	(2.9%)		
(% OF 1970 UNITS)		(22.3%)	
VACANCIES			
WHITE/BLACK TO VACANT	- 2,427	- 360	- 2,787
VACANT TO WHITE/BLACK	+ 2,032	+ 261	+ 2,294
TOTAL	57,880	6,339	64,219
STATISTICAL DISCREPANCY	- 163	- 53	- 216
1970 OCCUPIED UNITS	57,717	6,286	64,003

USBC, 1970, HC(4)-17,42,167,267

TABLE 52

RACIAL TRANSFERS BY REGION AND URBAN LOCATION, 1960-70
(in 000's of units)

NOTE: THE TOP FIGURE IN EACH CATEGORY IS THE WHITE TO BLACK TRANSFERS. THE NEGATIVE FIGURE IS BLACK TO WHITE TRANSFERS. THE BOTTOM FIGURE IS THE NET GAIN BY BLACKS.

	CENTRAL CITIES	REST METRO	NON-METRO	TOTAL
NORTHEAST	406	97	40	543
	- 45	- 19	- 8	- 72
	361	78	32	471
NORTH CENTRAL	389	52	27	468
	- 6	- 1	-	- 8
	383	51	27	460
WEST	120	47	3	170
	- 23	- 4	- 5	- 33
	97	43	- 2	137
SOUTH	291	67	84	443
	- 22	- 21	- 64	-106
	269	46	20	337
NATION	1,206	264	153	1,623
	- 97	- 45	- 77	-219
	1,109	219	76	1,404

USBC, 1970, HC(4)-1-267-271

TABLE 53

RACIAL TURNOVER, 1950-60
(in 000's of units)

	WHITE TO NON-WHITE	NON-WHITE TO WHITE	NET NON-WHITE GAIN
CENTRAL CITIES	878	62	816
REST METRO	100	34	66
NON-METRO	146	56	90
METRO SOUTH	166	4	162
NON-METRO SOUTH	102	38	64
METRO NORTH	812	92	720
NON-METRO NORTH	44	18	26

USBC 1960 COMPONENTS OF
INVENTORY CHANGE, P.56 & 125

TABLE 54

CENTRAL CITIES CHANGES IN STOCK 1960-70
(in 000's of units)

	WHITE OCCUPIED	BLACK OCCUPIED	TOTAL
1960 OCCUPIED UNITS	17,050	2,613	19,663
LOSSES			
DEMOLITIONS	- 1,094	- 423	- 1,518
MERGERS	- 248	- 17	- 266
OTHER	- 479	- 135	- 613
TOTAL	- 1,821	- 575	- 2,397
(% OF 1960 UNITS)	(11%)	(22%)	(12%)
GAINS			
NEW CONSTRUCTION	3,439	470	3,908
CONVERSIONS	147	98	244
OTHER	55	18	72
TOTAL	+ 3,641	+ 586	+ 4,224
(% OF 1970 UNITS)	(21%)	(16%)	(20%)
TRANSFERS			
WHITE TO BLACK	- 1,206	+1,206	-
BLACK TO WHITE	+ 97	- 97	-
TOTAL	- 1,109	+1,109	-
(% of 1960 UNITS)	(7%)	(42%)	
(% OF 1970 UNITS)	(6%)	(30%)	
VACANCIES			
VACANT TO BLACK/WHITE	+ 534	+ 116	+ 649
BLACK/WHITE TO VACANT	- 752	- 172	- 924
TOTAL	17,543	3,677	21,215
STATISTICAL DISCREPANCY	- 23	+ 1	- 17
1970 OCCUPIED UNITS	17,520	3,678	21,198

USBC, 1970, HC(4)-1-17,52,175,267

TABLE 55

1970 TENURE OF WHITE CENTRAL CITY OWNER-OCCUPIED UNITS IN 1960

(in 000's of units)

WHITE OWNER-OCCUPIED	6,402	(73%)
WHITE RENTER-OCCUPIED	931	(11%)
BLACK OWNER-OCCUPIED	413	(05%)
BLACK RENTER-OCCUPIED	153	(02%)
VACANT	235	(03%)
DESTROYED	423	(05%)
LOST IN CONVERSIONS AND MERGERS	139	(01%)
STATISTICAL DISCREPANCY	94	
ALL 1960 UNITS	8,790	

USBC, 1970, HC(4)-1-17 & 267

Appendix C
Race and Housing: An Opinion Analysis*

By
Paul M. Bunge

Housing Preference and Satisfaction

If able to choose among all types of housing, the average American would overwhelmingly prefer to live in a single-family, unattached dwelling unit, surrounded by an open lot of adequate size. This attitude, traditional in all opinion surveys and constant over time, reflects the basic American attitude toward what constitutes "home."

PREFERRED TYPE OF HOUSING

PREFERRED HOUSING	STAGE IN FAMILY LIFE CYCLE YOUNG SINGLE	YOUND-MARRIED NO CHILDREN	MARRIED CHILDREN	OLD-MARRIED NO CHILDREN	OLD SINGLE	OTHER	TOTAL
SINGLE FAMILY HOUSE	50%	91%	96%	84%	54%	81%	83%
APARTMENT	46%	6%	4%	10%	39%	18%	14%
NO PREFERENCE	4%	3%		6%	7%	4%	3%
	100%	100%	100%	100%	100%	100%	100%

SOURCE: J. B. LANSING, "RESIDENTIAL LOCATION AND URBAN MOBILITY," UNIVERSITY OF MICHIGAN, INSTITUTE FOR SOCIAL RESEARCH (JANUARY, 1966)

LOT SIZE PREFERENCE

OPINION OF PRESENT LOT	SIZE OF PRESENT LOT LESS THAN .1 ACRE	.1-.2 ACRE	.2-.3 ACRE	.3-.5 ACRE	.5 ACRE OR MORE	ALL LOTS
LOT TOO SMALL	4.2	11.2	4.2	1.0	1.3	24%
ABOUT RIGHT	5.8	26.4	15.1	12.3	8.7	67%
TOO LARGE	1.0	2.4	1.7	1.7	3.0	9%
	11%	40%	21%	15%	13%	100%

SOURCE: Lansing, op. cit.

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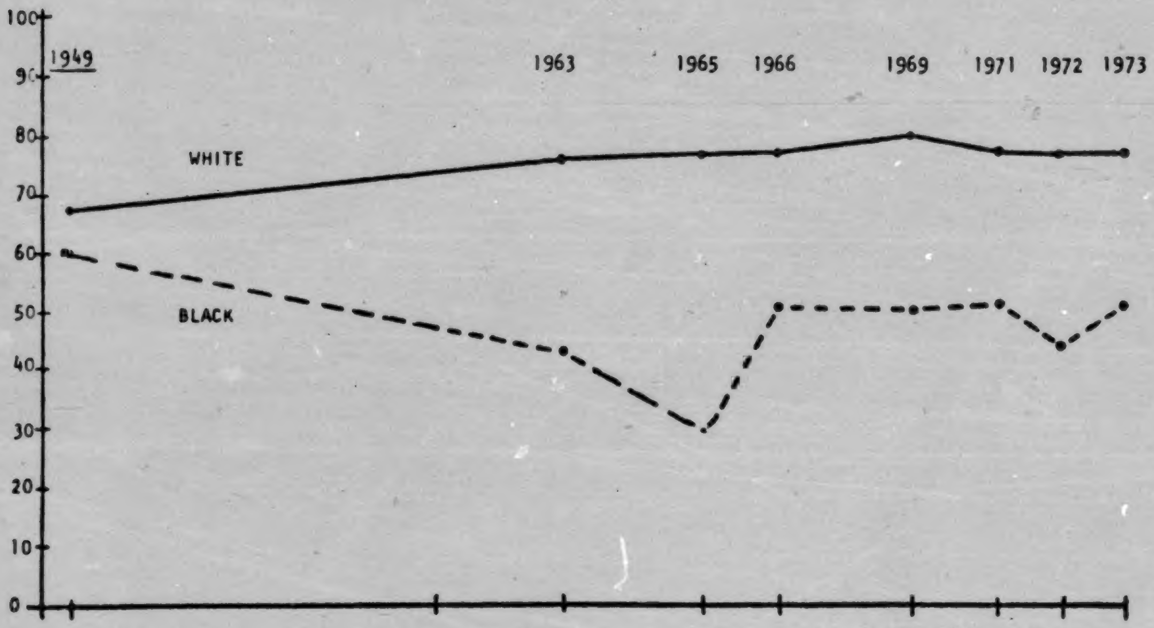
*This material has been adapted by Paul M. Bunge from several sources, but primarily from "American Opinion on Urban Issues" (HI-1734-P) by Frank Armbruster and Doris Yokelson, with contributionsby B. Bruce-Briggs, July 1, 1973.

In general, whites have been very much more satisfied with their housing than blacks and far more satisfied than dissatisfied. In 1949, 32 percent of Negroes were dissatisfied--only 4 percent more than whites--compared to 66% in 1965, 48% in 1969, 46% in 1971. The peak of dissatisfaction was in 1965, at the height of the racial turmoil, and the trend reversed itself the following year. From 1966 to 1971, Negroes were slightly more satisfied than dissatisfied with their housing. However, in 1972 dissatisfaction increased to a majority (53%) but this dropped again to 46% in 1973.

NEGRO AND WHITE SATISFACTION WITH HOUSING



Gallup Poll Data

The following Harris survey of blacks across the nation in March 1970 revealed that, except for their housing, blacks considered various aspects of their living conditions to have improved in the last half decade. They also felt that these conditions, including housing, were generally as good, or better, than the living conditions of whites living in the same area.

> As far as each of the following is concerned, do you feel you and your family are better off than you were a few years ago, worse off, or about the same?

	Better %	Worse %	About Same %	Not Sure %
The kind of job you (head of household) have	49	8	36	7
The kind of housing you have	41	11	45	3
Getting a good education for your children	61	9	22	8
Your being able to register to vote	49	2	40	9
Your being able to get adequate health and medical care	53	7	34	6

Would you say that each of the following is better than for most whites around here, not as good, or about the same?

	Better %	Worse %	About Same %	Not Sure %
The kind of job you (head of houshold) have	31	17	36	16
The kind of housing you have	28	18	41	13
Getting a good education for your children	31	12	43	14
Your being able to register to vote	23	5	56	16
Your being able to get adequate health and medical care	28	9	48	15

Housing and Integration

In various surveys, whites consistently show an overwhelmingly greater preference for segregated neighborhoods than do Negroes. The Opinion Research Corporation looked into the feelings of whites and blacks toward separate communities for Negroes. Whites were considerably more in favor of having new communities just for blacks.

"Entirely new communities just for blacks?"

	Whites	Blacks
For	45%	25%
Against	39%	58%

(No Opinion omitted)

Despite the feelings by most whites that Negroes are not actually being discriminated against, whites very clearly recognized racial discrimination in one poll on housing:[*]

> "Do you think in (Central City) many, some, or on[illegible] a few Negroes miss out on good housing because white own[illegible]s won't rent or sell to them?"

	Whites
Many	38%
Some	30
Only a few	22
None	4
Don't know	7

In the following question, racial discrimination might be a host to numerous discriminatory feelings; it is difficult to tell. A good part of "didn't like the people; undesirable people" might well be considered to be so.

> "Let's imagine that Mr. and Mrs. Smith were looking for a new home. They found a place they liked but they decided not to take it because they didn't like the neighborhood. What do you think they didn't like about the neighborhood?"

Dirty; not well kept up; crowded	47%
Didn't like the people; undesirable people	28
Too many children	21
Undesirable minority groups	16
Noisy, heavy traffic	10

Sample of Metropolitan Area Householders, 1965 and 1966. John B. Lansing and Gary Hendricks, *Automobile Ownership and Residential Density* (Ann Arbor: University of Michigan Survey Research Center, 1967).

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[*] Angus Campbell and Howard Schuman, *Racial Attitudes in Fifteen American Cities* (Ann Arbor, University of Michigan Institute for Social Research, 1963), p. 30.

In a survey of the Castlemont section of Oakland, a blue-collar neighborhood which had been integrated and where both races felt that integration was working well, almost half of the whites preferred a segregated neighborhood and half didn't care.

> "On the whole, how is it having both whites and Negroes living in the same block (neighborhood)? Does it work out very well, fairly well, or are there problems?"*

	White	Black
Very Well	29%	70%
Fairly well	50	24
There are problems	15	2

	White	Black
Prefer all one race	45%	1%
Prefer mixed	3	45
Doesn't matter	49	54

The Roper survey taken in Louisville, Kentucky in 1970 showed that three-fourths of the Negroes there preferred neighborhoods "evenly divided by race," but that almost two-thirds of the whites would like them all white and another fifth wanted them "mostly white." This was so despite the fact that "complete racial separatism was rejected strongly by both races."**

A series of Gallup polls on the reaction to the integration of the neighborhood, covering four years, showed a sharp upturn between 1963 and 1965 in those who would remain if one or a lot of Negroes moved in, and then a leveling off from 1965 to 1967, showing no trend. A majority said they would stay if "a Negro moved in," but not if "a lot" of Negroes did.

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*William L. Nicholls II, *et al.*, *The Castlemont Survey* (Berkeley: Survey Research Center, University of California, June 1966), pp. 179-187.

**Jean Heinig, "A Tale of Two Cities," *The Public Pulse*, April 1970, p. 4.

Reaction to the Integration of the Neighborhood

National Sample

	Would stay if "a" Negro moved in next door	Would stay if "a lot" of Negroes moved into the neighborhood
1963	55%	22%
1965	65	31
1966	55	30
1967	65	29

A nationwide Harris survey of blacks in 1970 showed that blacks felt most discriminated against when looking for a place to live.

> "Let me read you some situations you might find yourself in. Suppose in each situation you had to see a white person. Tell me for each if you think you would be likely to be given a hard time by the white person or not."

	Likely Given Hard Time %	Not Given Hard Time %	Not Sure %
Applying for a job in a big company	59	26	15
Looking for new housing	65	25	10
Getting good service in an expensive restaurant downtown	35	52	13
Applying for a loan in a bank	48	38	14
Going to a government office to apply for a benefit	39	40	21
Getting waited on in a big department store	25	70	5
Finding a taxi downtown	29	60	11
Getting into a good hotel or motel	29	53	18
Getting admitted to a hospital	31	59	10
Applying for unemployment insurance	38	40	22
Getting help in an employment agency	42	37	21
Enrolling your children (yourself, IF TEENAGER) in an integrated school	33	48	19

One question on the sensitive issue of open-occupancy legislation, forbidding racial discrimination in housing, was included in the 1970 NORC survey. The question, asked of northern whites, was, "Would you favor or oppose making it against the law to refuse to sell or rent houses and apartments to Negroes?"

Among the Protestant, Catholic and Jewish groups questioned, only two registered higher than 30% in favor of such legislation--the German Catholics favored it by about 32% and the Jews by about 45%. In analyzing the responses to this survey question, the authors found that the media image of the ethnic racist was not true. Of Catholic ethnic groups questioned, the Irish, the Germans and the Southern Europeans (largely Italians), were slightly more in favor of such legislation than the northern, "white, Anglo-Saxon Protestants." Only Slavic Catholics were less in favor of open housing laws than the northern, Anglo-Saxon Protestants. The responses to this question were analysed on the basis of whether the respondents lived in integrated or nonintegrated neighborhoods to see if living in black neighborhoods promoted anti-integrationist attitudes. The findings did seem to suggest that northern white groups living in integrated areas were more anti-integrationist than the same groups living in nonintegrated areas, except for the Irish Catholics, the German Catholics and the Jews. Jewish support for integration rose when they were living in more integrated areas, German Catholic support rose slightly and Irish support remained the same. WASPS, Southern Europeans, and Slavs were less in favor of integration when they lived in integrated neighborhoods.*

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*Also see Andrew Greeley, "Political Attitudes Among American White Ethnics", Public Opinion Quarterly, Summer, 1972, pp. 213-220.

There is an abundance of examples of white discrimination for pragmatic reasons. Also, some middle-class Negroes are discriminating against the penetration of lower-class blacks (and whites) into their areas. An example might be that of home-owning blacks of New Cassel, on Long Island, who refused to allow subsidized housing for low-income blacks to be built in their community. The reasons cited sounded identical to those usually given by home-owning whites: "People who rent don't keep up their houses"; "We want these funds spent in a proper manner"; "My husband and I worked hard for 12 years to keep up our home and are not sure that families moving in under these circumstances will help the community."

When whites only were asked about neighborhood racial integration in term of class, they responded as follows:

> If a Negro family of the same income and education moved next door to you, would you mind it a lot, a little, or not at all?*

Whites Only	
Mind a lot	19%
Mind a little	25
Not at all mind	49
Already a Negro next door	4

It seems a well-nigh impossible task to divide "purely" racial discrimination from class, social or economic discrimination. Busing is an example of an issue of this sort, in which the racial discrimination aspect seems to become secondary to a multitude of parent-child feelings.

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*Angus Campbell and Howard Schuman, op. cit., p. 37.

Government Action and Housing

Poor housing and the presence of slums are no longer perceived by the American people as the major urban problems they once were, perhaps because of the relative worsening of other big city ills such as crime and breakdowns in urban transportation systems. The past twenty-five years has witnessed a major shift in the attitudes of large city residents in regard to the problems confronting urban living.

PROBLEMS - LARGE CITY RESIDENTS

1948		1973	
37%	Poor Housing/slums	21%	Crime
30%	Transportation/traffic	11%	Transportation/traffic
12%	Dirt/unsightliness	10%	Drugs
8%	High taxes	6%	Juvenile delinquency
7%	Corrupt politics	5%	High taxes
4%	Crime	4%	Community services
3%	Racial problems	4%	Pollution
3%	Juvenile delinquency	4%	Poor housing/slums
3%	Lack of recreation	4%	Education
		3%	Sanitation
		3%	Racial problems

Gallup Polls

For the country as a whole, housing conditions now rank at the bottom of the list of community problems.

MOST IMPORTANT PROBLEM

	"What is the most important problem facing this community today?" (1968)		"What do you regard as your community's worst problem?" (1972)
1.	Crime and lawlessness (#2 nationally)	1.	Crime
2.	Education: crowded schools, poor quality of education	2.	Transportation
3.	Transportation: parking, traffic	3.	Drugs
4.	High taxes	4.	Juvenile delinquency
5.	Unemployment	5.	Taxes
6.	Lack of community service programs	6.	Sanitation
7.	High cost of living (#1 nationally)	7.	Unemployment
8.	Racial problems (#3 nationally)	8.	Community service problems
9.	Slums, overcrowded housing	9.	Education
10.	Poor local government	10.	Pollution
11.	Sanitation: garbage, sewage	11.	Racial problems
12.	Lack of cultural, recreational facilities	12.	Recreational needs
13.	Lack of religion, ethics	13.	Slums and housing

Gallup Polls

For blacks, however, inadequate housing conditions are foremost among the responses given as to neighborhood problems. A Roper survey conducted in Louisville, Kentucky illustrated the discrepancy between black and white perceptions of urban ills. Although Louisville's whites most frequently answered "nothing" in response to the question "what are the real problems" in their neighborhoods, Negroes had a plethora of real problems. In conducting the interview, the interviewers did not mention race until the interview was half over. This particular question was asked before this time, and responses were later compared as to black and white. Apparently the living problems were not a direct result of living in a poor neighborhood: "Almost without exception, every neighborhood problem on the list is less troubling to lower economic level whites than to upper level Negroes."[*]

NEIGHBORHOOD PROBLEMS

	Negroes	Whites
Supply of good housing	43%	3%
Juvenile delinquency	41	14
Crime	39	12
Upkeep of houses and yards	35	13
Street cleaning and repairs	30	18
Street lighting	26	23
Child day care for working mothers	23	10
Public transportation	21	21
Unemployment	19	2
Concern of public officials	16	10
Police treatment	11	2
Schools and education	10	6
Garbage collection	10	6
None or don't know	7	28

Roper Poll--Louisville, 1970

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[*] Heinig, op. cit., p. 1.

The majority of blacks do have differing opinions from a majority of whites on numerous social and political issues. Their needs are pressing and real, and improvement of their conditions is one of the urgent problems of our time. Negroes have traditionally and overwhelmingly voted Democratic, the party of the workingman, and poor and the ethnic minorities. On most foreign policy, political, and domestic issues today, Negroes have been voting the way of the Democratic liberal, except in those issues that directly affect their children and the school--such as legalization of marijuana, busing, and discipline in the school--in which they strongly line up with the majority of the population, and in some cases, such as discipline in the school, favor stricter action than the majority. One can argue about which is more important--black opinion differences from whites, or black similarities--but a good case can be made for seeing black opinion as having the same values and problems of whites but with different emphases.

But there is a big difference between what the public sees as an important problem in their own communities and their desire for government action on a national scale. As we see from the table following, although crime ranked rather low as a problem in 1965, it ranked high in the public's priorities for action. We may attribute this to the near-universal belief that crime control is a legitimate government function whereas the public may have mixed feelings regarding whether the government has the duty or the competence to deal with problems such as poverty. Note also the inclusion of "improving housing" in this table whereas in "most important problem in this community" surveys those who chose that issue did not reach even 1% of the public.

TOP DOMESTIC PRIORITIES

"Which three of these national problems would you like to see the government devote most of its attention to in the next year or two?"

	1965 %	1970 %
Reducing the amount of crime	41	56
Reducing pollution of air and water	17	53
Improving public education	45	31
Helping people in poor areas	32	30
Conquering "killer" diseases	37	29
Improving housing, clearing slums	21	27
Reducing racial discrimination	29	25
Reducing unemployment	35	25
Improving highway safety	18	13
Beautifying America	3	5

Gallup Polls

In general, the public believes that without government programs to improve inner city housing conditions, the fate of poor people who do not have access to the general housing market will worsen.

--- By 70-23 percent, a big majority agrees with the claim that "lower income people will not have adequate housing unless the federal government pays some of the cost of building the projects."

--- By 51-41 percent, a majority also agrees that "by ending low income housing projects, poor people are doomed to live in slums."

--- By 52-36 percent, a majority also holds the view that "the only way people with low incomes can get modern apartments is for the government to pay part of their rent."

--- And a narrow 45-44 percent agrees with the statement that "to shut off new public housing is to doom low income people, racial minorities, and older people to a life of misery."

Source: The Harris Survey, March 19, 1973.

These feelings are contrasted with the belief that public housing programs have been badly managed in the past.

> --- By 74-15 percent, a sizable majority agrees with the statement that "public housing has been a failure because the projects become run down quickly and are badly managed."
>
> --- By 47-30 percent, a plurality accepts the view that "mammoth public housing projects have been bad for the people living in them and for the cities where they have been built."
>
> But part of the opposition to spending new monies on housing for low and moderate income families these days comes from a more generalized feeling that these times of inflation are not the best period in which to put taxpayers' funds into new construction. By 65-22 percent, a sizable majority goes along with the contention that "the cost of building public housing has gone up so much that the tax load on the rest of the public to pay for it has become unbearable."
>
> Source: The Harris Survey, March 19, 1973.

In sum, while the general public approves of government efforts to ameliorate slum conditions, the American people do not perceive housing as a major critical issue in domestic affairs and do believe that program administration should be improved.

HOUSING

"The Future Supply of Housing"

by

Lawrence Mock

This chapter was originally issued as a Hudson Institute Paper under the title Poverty and Housing: A Supplementary Paper, HI-2074-P, dated August 1974.

CHAPTER I

THE FUTURE SUPPLY OF HOUSING

Forecasting the need for new housing in the U.S. by the Year 2000 is a relatively straightforward procedure. From aggregate need for housing (equation 2-1) which is the sum of the projected number of households, vacancies, and seasonal and second homes in 2000, it is necessary only to subtract the depleted 1970 stock of housing.[*] The result (equation 2-2) can be divided by 30 to get a rough approximation of the yearly production rate necessary to ensure adequate housing for all at the turn of the century. Most of the variables in these equations are easily quantified as their values are either predetermined or easily extrapolated from existing trends.

$$A2000 = HH2000 + V2000 + S/S2000 \qquad (2\text{-}1)$$

$$N2000 = D2000 - (S1970 - R)^{**} \qquad (2\text{-}2)$$

Households in 2000 are a function of total population, and more specifically, of population over a certain age. Since the vast majority of those who will be household heads in the Year 2000 are already born, calculation of this figure involves little margin for error. Even if the birth rate were to change dramatically there would be little effect on the absolute number of households. Only the size of the household (family) would be affected, which could conceivably have significant impact on the type but not the quantity of housing units needed. Alternative

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[*] 1970 is used as the base year rather than 1974 because complete information on all variables is available.

[**] A = aggregate need, HH = households, V = vacancies, S/S = seasonal and second homes, N = new housing needs, S = stock, R = removals.

Census Bureau projections of households in 2000 are given in Table I. Accuracy in determining this figure is extremely important, since it is the basis for all other calculations. It is interesting, therefore, to note that even under extreme assumptions concerning the U.S. birth rate between 1970 and 2000 the difference in the number of households formed is only about 5 percent. This is the case, of course, because few of the 71.6 million additional people which result from a high birth rate will form households by 2000.

Vacant housing is the component of aggregate need which allows for the mobility of the population. Generally, there are four reasons for housing being vacant: available for rent, available for sale, awaiting occupancy, or held off the market. The Department of Housing and Urban Development (HUD) has calculated the probable percentages of each based upon historical data. If we presume the future population will be at least as mobile as the present, then use of these figures will ensure that any miscalculation resulting from a change in these trends will tend to underestimate rather than overestimate aggregate need.

Increasing general affluence suggests that seasonal and second homes will consume a greater proportion of total housing than previously was the case. Although at first it may seem that this is an inclusion of an unnecessary luxury in aggregate used, it is important to recognize that in a market economy the demands of the affluent are met before those of the poor. If, therefore, the poor are to have adequate housing the need for seasonal and second homes must be included. The data summarized in Table II presumes a 0.1 percent increase per year in the demand for such homes, up to a 5.6 percent total in 2000.

TABLE I

PROJECTIONS OF THE U.S. POPULATION AND NUMBER OF HOUSEHOLDS IN THE YEAR 2000 UNDER DIFFERENT BIRTH-RATE ASSUMPTIONS (IN MILLIONS)

	2-Child Family Assumption*	3-Child Family Assumption**
U.S. Population, 1970	204.9***	204.9
U.S. Population, 2000	264.4	336.0
U.S. Households, 1970	63.5	63.5
U.S. Households, 2000	100.6	105.7

*USBC "Series E" Projection

**USBC "Series B" Projection

***All data is computed to nearest 1,000 and rounded for presentation to nearest 100,000.

TABLE II

SUMMARY OF HOUSING NEED IN YEAR 2000 UNDER ALTERNATIVE BIRTH RATE ASSUMPTIONS

	2-Child Family Assumption	3-Child Family Assumption
Aggregate Need for Housing in Year 2000	116.9*	122.6*
Depleted 1970 Stock in Year 2000	47.9**	47.9**
New Housing Need by Year 2000	69.0	74.7
Average Yearly Production to Meet 2000 Need	2.3	2.5

*See Table III

**See Table VI

The stock of existing housing has been extensively cataloged by the Census Bureau. Removals from this stock are of three types: removal of non-dilapidated units due to demolition for highways or urban renewal, removal by natural forces such as fires and floods, and removal of units either presently dilapidated or when deteriorated in the future. This paper uses HUD projections of such losses to calculate total removals from existing stock.

It would be an unnecessary duplication of effort for this paper to repeat the many projections* of future housing need based upon the framework outlined so far. Each of these reports concludes that an annual rate of construction of between 2.4 and 2.6 million units is required to adequately meet the demand for housing in 2000. The data presented in Tables II through IV summarize these results in a manner that should provide an overall perspective on the size and dimensions of future housing need.

Table II projects U.S. housing need under alternative family-size assumptions. Regardless of the future birth rate, the U.S. will need on the order of 120 million dwelling units in 2000. Existing stock will provide roughly 50 million of these units. The remaining 70 million must be constructed in the interim, which requires a yearly production level of about 2.4 million.

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*See particularly the work of the following: David Jones, "Projections of the Housing Demand to the Year 2000," for the Commission on Population Growth and the American Future; Frank E. Kristoff, "Urban Housing Needs Through the 1980's: An Analysis and Projection," for the U.S. National Commission on Urban Problems; "Economic News Notes for the Building Industry," by the National Association of Home-Builders; "The Outlook for U.S. Housing Needs," in The Report of the President's Committee on Urban Housing; and The Second Annual Report on National Housing Goals (HUD).

Tables III through VI present the intermediate conclusions which led to Table II's summary. In Table III the total need is disaggregated by type: owned, rented, inventory, and seasonal. Table IV assigns the increase (or loss) attributable to each component of new housing need. Table V is the Census Bureau tabulation of existing stock. Table VI depletes the existing stock according to HUD projections. 1.8 million existing delapidated units are initially retired, and an additional 19.2 units are removed as they deteriorate. Mobile home housing, as presently built, has a life expectancy of only 10-15 years, so all of it is removed.

In summary then, this chapter has attempted to project U.S. housing needs by 2000. We have shown that by this data there will be over 100 million households, all requiring adequate housing, sufficient vacancies to allow mobility, and the opportunity to purchase seasonal and second homes. This will necessitate the existence of about 120 million units, of which existing 1970 housing can expect to provide roughly 50 million. We must construct the additional 70 million over the next two and one-half decades. The quality of its design and the appropriateness of its location will shape the face of the U.S. over the next century.

It is important to recognize that this projection is based in large part upon a variable that is predetermined. The number of U.S. households will increase by 40 million regardless of any changes in the birthrate. If the need of these new families for a home of their own is unmet, it may create a fundamental reorganization of our housing style.

Finally, failure to construct sufficient housing will have serious consequences for those least able to afford it. In particular, the young and the elderly, the poor of all ages, and anyone else at a disadvantage

TABLE III

AGGREGATE HOUSING NEED IN 2000 UNDER ALTERNATIVE BIRTH-RATE ASSUMPTIONS, BY TYPE:*

	2-Child Family Assumption	3-Child Family Assumption
Owner-Occupied	72.0	67.4
Owner-Inventory	3.8	3.6
Owner-Total	75.8	71.0
Renter-Occupied	33.7	33.2
Renter-Inventory	6.2	6.0
Renter-Total	39.9	39.2
Seasonal	6.9	6.6
Total	122.7	116.9

*Projections based upon data presented by David Jones in Volume II of the research reports of The Commission on Population Growth and the American Future, Washington, 1972

TABLE IV

COMPONENTS OF NEW HOUSING NEED IN YEAR 2000

	2-Child Family Assumpton	3-Child Family Assumpton
Increase in Occupancy Demands:	37.1*	42.2*
Increase in Vacancies Required:	4.3**	4.6**
Increase in Seasonal & Second Homes:	6.6***	6.9***
Losses from 1970 Stock:	21.0****	21.0****
Total New Housing Need in 2000:	69.0*****	74.7*****

*Table I

**Approximate figures

***Table III

****Table VI

*****Table II

TABLE V

1970 HOUSING STOCK*

Owner-Occupied:	39.9	57.9%
Renter-Occupied:	23.6	34.3%
Vacant:	3.6	5.2%
Mobile-Owner Occupied:	1.5	2.2%
Mobile-Renter Occupied:	.3	.4%
Total 1970 Housing Stock:	68.9	100.0%

*Source: USBC, HC (VI), 1970 (% more)

TABLE VI

DEPLETION OF 1970 HOUSING STOCK BY YEAR 2000

Owned and Occupied Units--Total:	39.1
Non-Dilapidated Losses:	4.2
Dilapidated Losses:	3.9
1970 Stock in Year 2000:	31.0
Rented and Occupied units--Total:	25.0
Non-Dilapidated Losses:	2.7
Dilapidated Losses:	7.6
1970 Stock in Year 2000	14.8*
Vacant 1970 Units: Total	2.9
Non-Dilapidated Losses:	.3
Dilapidated Losses:	.5
1970 Stock in Year 2000:	2.7
Mobile Home Units--1970:	1.9
Mobile Home Losses:	1.9
1970 Stock in Year 2000	0
Total 1970 Units:	68.9
Total Losses by Year 2000:	21.0
1970 Stock in Year 2000--Total:	47.9

*Data to this point extracted from Commission on Population Growth and the American Future Report, IBID; additional computations my own. Discrepancy in vacant figure with previous table due to inclusion of portion of vacant in other categories.

in the market place (such as groups commonly discriminated against) will be forced to an even greater extent than at present into substandard or overcrowded housing.

Of course, the need for 70 million new units should not be looked upon as a problem per se, particularly in a market economy. Few industries would call a guaranteed demand for their product a problem. The situation becomes problematical only if industry does not, or cannot, respond to this opportunity; it then becomes the problem of government to remedy. The next chapter, therefore, will attempt to assess the housing industry's ability to meet this need.

CHAPTER II

THE U.S. HOUSING INDUSTRY

Production History

In the previous chapter we targeted a production level of 2.3 to 2.5 million units per year in order to meet U.S. housing needs in 2000. In 1968 Congress enacted a piece of legislation--The Housing Act of 1968--whose stated intent was to provide 26 million new dwellings in the following decade. Since 7 of the 10 years in the Congressional period have already elapsed, we can base our analysis of the housing industry's ability to meet our goal of 70 million new units by 2000 on its success or failure in reaching Congress' short-term goal.

Housing production over the last quarter century is summarized by Chart I. The data used to construct this chart show that the seven-year period from 1968 to 1974 have been the most productive in U.S. housing history. Yet the industry has failed in all but two of the seven years to produce the yearly average required to meet the Congressional figure. At this level of production the decade's output will fall 4 million units short of the 1978 goal.

The long-range trend is even less encouraging. The 26-year average production rate is less than 2 million per year. 1950 production was the fourth highest in this period. If the next 26 years are as bad as the last 26, we will fall over 20 million units short of our 70 million goal.

The composition by type of recent housing production, as shown by Chart II, is equally unencouraging. Polls show what Americans would prefer to buy; production statistics show what they actually do buy. A Michigan survey of public opinion revealed that 83 percent of those contacted would prefer to live in a single-family, detached home. Yet single-family homes (excluding mobile) have contributed less than half of total production since 1967.

Statistics on mobile homes reveal their increasing importance in U.S. housing production. In 1950 they comprised slightly more than 3 percent of total housing "starts." In 1973, however, they were over 20 percent of all housing produced and over 33 percent of all single family units. Although this form of housing is the least durable (and some might add, the most deplorable), without it U.S. housing production would have failed in every year to reach 2.4 million units annually.

It is apparent that the U.S. housing industry, as presently structured and subject to existing constraints, will be unable to produce sufficient housing over the next quarter century to meet U.S. housing needs in 2000. It is instructive, therefore, to look at both the structure of the industry and the constraints to which it is subject before suggesting policies to stimulate production.

Structure of Industry

The head of the General Electric Corporation's industrialized housing division once said that "housing is the only major industry failing to participate in the greatest economic boom the world has ever known." In part this is true because it is the only major industry still organized along pre-industrial craft lines. The 1972 Census of Industry (Table VII) reveals that the average construction firm had about eight employees and less than a quarter of a million dollars in net receipts. Over half these firms built single-family homes exclusively, and these firms had an average of less than five full-time employees and slightly more than one-eighth of a million dollars in net receipts. Many of the firms reported no full-time employees.

Production levels per firm mirror scale of the industry. A National Association of Home Builders survey revealed that 64 percent of the firms in the industry produced less than 25 houses per year, and 37 percent produced 10 or less. Only 8 percent produced over 100 units, and only .8 percent produced over 500.

Arrayed against these firms are their much more concentrated suppliers and the large national craft unions. The competitive position of the housing industry vis-a-vis its inputs would seem to suggest a national advantage to be gained from large-scale production. Although such advantages certainly exist (and will be discussed in a subsequent section on factory-built housing), there are institutional and governmental barriers to large-scale production which reinforce the inefficient and ineffective existing structure of the housing industry. A brief discussion of these barriers, therefore, follows.

Constraints on Production

Constraints on production operate in two ways to limit the total industry output. First, they prohibit existing firms from expanding production to an economically justifiable scale by assessing additional (marginal) costs. More important perhaps, particularly in the case of the housing industry, they prevent firms capable of large-scale production from invading and improving the industry. This is done by impeding the introduction of more efficient techniques and cheaper but equally effective materials.

Six constraints on production seem particularly important, specifically:

1. Variation in local building codes.
2. Impact of zoning and subdivision regulations.
3. Multiplicity of governmental agencies.
4. Complicated product approval process.
5. Union opposition and work rules.
6. Financial considerations.

Extensive analysis of these constraints is beyond the scope of this paper, but a few observations on each are included below.

Building Codes. Building codes are probably the single most important obstacle to large-scale production. Rather than being based upon performance criteria, such as strength, noise abatement, durability, etc., they specify the materials and techniques that must be used in the construction of a house. This, of course, prevents the introduction of cost-saving materials and labor-saving processes.

Even more discouraging to large-scale production is the extreme variation in standards within a single market area. A survey conducted by the National Commission on Urban Problems found that only 15 percent of cities over 5000 in population had building codes based on one of the four National models and reasonably up-to-date. A producer studied by this Commission was subject to 25 different codes in his six-state area of operations. The resultant overdesign of his product added $2492 to the cost of a $12,000 home.

This high degree of variation of specificity in local building codes has no economic or social rationale. It prevents standardization of a product and the utilization of innovative materials. It limits output and raises prices.

Zoning and Subdivision Regulations. Like building codes, zoning and subdivision regulations are primarily local, often exclusionary, and unnecessarily restrictive. They raise the cost of land for use, including housing, by artificially limiting its supply. The allocative mechanism of the market is further distorted by specification of type and density. Zoning often excludes completely the most economical form of low-cost housing, mobile homes. We have earlier shown that mobile homes comprise a significiant and increasingly important part of the total housing market, and the bulk of housing production under $15,000. By the end of the Twentieth Century, one possibility is that the bulk of the rural poor will live in such housing. Failure on the part of municipal officials to adopt a positive attitude towards the acceptance of factory-built housing within city limits could be one cause of relegating the urban poor to substandard, overcrowded housing. Development of durable, esthetically-pleasing forms of this housing will only come through adoption of a positive approach to its regulation.

Governmental Bureaucracy. The following local agencies oversee and regulate housing construction:

1. Local planning board
2. Zoning board

3. Building department
4. Health department
5. Engineering department

In addition, a producer must often deal with the following independent authorities during construction of housing:

1. A redevelopment authority
2. A housing authority
3. Community renewal agencies

The responsibilities of these agencies are at best overlapping and often are contradictory. They delay construction, create bottlenecks in production, and discourage innovative productive techniques. A good example of such obstruction is the requirement for individual on-site inspection of factory-built housing.

Product Approval Process. The product approval process, through which new building materials are sanctioned, discourages innovation in the building industry. Over 150 associations and technical groups exist which generate and maintain standards. Even after approval, the producer must overcome the local building codes on an individual basis.

Union Opposition. Unions resist change in construction techniques through work rules agreed to by the major craft unions. These rules specify work that must be done on-site, such as wiring and plumbing, even though these can often be done more efficiently in a factory. One producer of both factory-built and conventional housing estimated that the amount of labor required for on-site plumbing was triple all that used to construct a factory-built house. Work rules also prohibit the use of certain materials and tools, and require excessive labor for the job. This "featherbedding" procedure also limits the variety of work that certain categories of labor perform. In Indiana, for example, only carpenters are allowed to straighten nails.

Financial Considerations. Whereas building codes are the greatest obstacles to innovation in housing, financial considerations are the most serious barriers to increased production. Housing, more than any industry, is subject to the vagaries of the money market. Both the producer and the consumer rely upon loans to complete a housing transaction. The producer (or general contractor) borrows money to purchase land, labor, and materials. When money gets tight, housing production drops off steeply. This accounts almost completely for the recent severe decline in housing "starts".

Similarly, the consumer borrows money in order to purchase a house. Historically, savings and loan institutions account for the bulk of housing loans. Because a maximum is set on the interest they can pay to attract money, in periods of tight money their loanable funds quickly dry up. This is the situation most savings and loan institutions presently find themselves in. In New York state, for example, savings banks lent 1.7 billion dollars less this June than last June.

In periods of inflation, when demand outstrips supply, investment opportunities cause savings and loan assets to diminish as commercial banks offer higher interest rates to attract savings. The small-scale housing producer has trouble competing with his corporate counterparts, in part because his market is diminishing due to a slackening of consumer demand, due in turn to the unavailability of low-cost loans in savings banks. It is impossible for government to break this vicious circle without either manipulating the general money market to end inflation, which it has proved unable to do, or financing new housing by underwriting housing loans on a massive scale, which it has proved unwilling to do.

The next chapter discusses the impact of these six constraints on production at present, and assesses economic-perspective, system-wide ramifications of their removal. Before turning to this subject, however, it is useful to briefly consider the cost of housing generally, and the advantages of factory-built housing specifically.

Cost of Housing

There are two costs associated with housing, the purchase price, including financing, and the operating or maintenance cost. Although intuitively one suspects that operating costs could be reduced through innovation in the housing industry, it is the purchase price that would be most affected, and upon which this section therefore focuses.

Table VIII apportions the cost of housing among its various components. It also accounts for the 40 percent inflation in the cost of comparable housing in the last 5 years. It is based upon data for a house costing $25,600 in 1969 and now costing $35,800. The impediments to efficient production discussed in the previous section affect each component, zoning affecting land prices, the realities of the money market affecting financing rates, and building codes, governmental bureaucracy, product approval procedures and union opposition affecting labor and materials. Adjustment or removal of these constraints would have considerable impact on the cost of housing produced in the traditional

TABLE VIII

HOUSING COST BY COMPONENTS

Component	% of Total Cost, 1969	% of Total Cost, 1974	% Change
Land	22	25	+59
Financing	7	10	+100
Overhead + Profit	13	13	+40
Labor	17	15	+21
Materials	37	32	+22
Other	4	5	+75
TOTAL	100	100	+40

Based upon information provided in Section 8, page 3, The New York Times, July 28, 1974.

manner. More importantly, it would encourage large-scale, factory oriented techniques of production. The following section assesses the impact of such processes upon housing costs.

FACTORY-BUILT HOUSING

When housing production is taken off the site and into a factory, it is called by many names. At present, most factory-built housing is called "mobile". In fact, most "mobile" housing never moves from the spot to which it is initially taken. With the advent of double-and-triple wides ranging in price up to 90,000 dollars, moving will become even less common. Yet by calling a factory-built house a "mobile" home, producers circumvent most local building codes.

"Mobile" homes are not the only factory-built housing, however. Prefabricated homes which are erected on-site are an increasing portion of the housing market. Modular homes, which resemble mobile homes except for the wheels, have been used successfully in the construction of such projects as The Contemporary Hotel in Walt Disney World. Moshe Safdie showed the high-density design possibilities for such construction in Montreal's "Habitat". Finally, individual components used in traditionally constructed homes can be fabricated in a factory much more economically than on-site. These range from pre-hung doors to entire walls complete with plumbing.

At present, however, factory-built housing has not demonstrated its potential. The large firms such as Westinghouse and U. S. Steel that entered the housing market have achieved at best limited success and have had little overall impact on either cost or total production. The firms within the industry have shown little propensity to expand. This is primarily due to the inability of either new entrants or existing firms to achieve significant economies of scale from factory-built housing under the constraints on production outlined above. Let us presume, therefore, that these constraints are removed or remodeled and assess what advantages would result from increased production of factory-built housing.

The cost of materials, the single biggest expenditure in housing, would decline substantially. If building codes and product approval procedures were standardized, overdesign of the product would not be necessary. We have already shown where, in one instance, this would have reduced a builder's expenses by 17%. Innovation would become possible. Additionally, if the producer increased his factory output to an efficient scale he could purchase building materials wholesale. The National Commission on Urban Problems estimated that a 15-25% savings on materials would be possible through wholesale rather than retail purchase.

Reform of zoning and subdivision regulations would lead to a reduction in the cost of land. There is no economic justification for developing one kind on a parcel-by-parcel basis. Similarly, there is no reason why compatible land uses cannot coexist in the same neighborhood. The cost of land as a percentage of total price will diminish if there is a movement to higher densities in urban areas. At present, even the most crowded U.S. cities have densities far below their European counterparts. To what extent such reforms would reduce land prices is unknown. However, land is the one component of total housing cost that is easily separated from the others, all of which relate to the structure, and is thus subject to some control through expression of consumer preference.

Labor costs, the third largest component of total housing cost, would decline if housing were factory-produced. Unskilled or semi-skilled industrial labor could replace expensive craft labor in many instances. Specialization would lead to higher productivity per worker. Year-round production would allow employers to hire on a full-time rather than on a fee basis, and give greater flexibility to scheduling.

The cost of financing a home prior to construction by the producer would decrease due to quicker, more predictable factory production. Year-round production would mean less financial overhead would be needed at any one time.

The savings that would accrue to the consumer would be considerable. For every dollar saved in the production process, additional savings would be realized in reduced profits and overhead, lower interest payments on loans, and a smaller tax assessment. An example of the savings possible is the Soviet "Block-Box" system, presently in operation in Minsk, U.S.S.R. This system produces a four-room apartment made primarily of prestressed concrete panels, for between $3,000 and $3,500. Using this system, a five-story apartment complex can be built in roughly two days.

All the above reductions have been based upon production economies resulting only from producing the traditional home within a factory where industrial processes and economies of scale can come into play. One suspects that such production processes, in addition to lowering the cost of the traditional home, would also result in a changing concept of the home more consistent with modern-day lifestyles. In a society where the average person changes residence at least every five years, there may be little reason to insist upon a house that is any more durable than a well-made car.

Similarly, there is no reason why a house has to be thought of as a single entity. Perhaps more appropriate would be the image of a stereo component system. Using this analogy, a house would expand or contract according to the needs of the occupant(s). Innovations such as these are possible only in an industry capable of mass production, and in a political and social environment which adopts a positive perspective in its regulation. The housing industry, as presently structured and constrained, cannot provide even the quantity of housing necessary to meet the needs of Americans as they move into the 21st Century. Equally important, it cannot provide the density of design to meet the changing requirements of all segments of society. Perhaps most tragic may be its inability to supply the disadvantaged with even the minimum housing requirements at a price they can afford.

HEALTH

"Nonaffluent Behavior and Attitudes Related to Health and Well-being"

by

Jane Newitt

This chapter was originally issued as Chapter VIII in a Hudson Institute Research Report entitled The Nonaffluent: A Statistical Profile, HI-2224-RR, dated April 1975.

NONAFFLUENT BEHAVIOR AND ATTITUDES RELATED TO HEALTH AND WELL-BEING

A. Health States

1. As Self-perceived (NORC Survey)*

The percentage of Americans reporting "excellent" health rises sharply with income--18% of the poor, 28% of the nonaffluent, 39% of the lower affluent, and 44-47% for those with incmes $15,000 and over. Among nonaffluents, 44% describe their health as "good," 23% as "fair," and 5% as "poor." By contrast, 14% of the poor report poor health. The combined percentages for "fair" and "poor" are P = 47%, NA = 28%, LA = 22%, and MA and UA = 16 and 12%

Not surprisingly, people who express very great or great satisfaction with their health** are less common at lower than higher income levels, but these differences are not as large. The nonaffluent are more than twice as likely to express strong satisfaction with their health status as to describe it as excellent; the poor are two and a half times as likely; the most affluent, only one and a half times as likely. Probably these differences are largely accounted for by the higher prevalence among lower income people of the elderly who regard less than excellent health as normal.

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*The NORC survey referred to throughout this chapter is the General Social Survey, July 1974, conducted by the National Opinion Research Center of the University of Chicago under its National Data Program for the Social Sciences. I have designated the NORC survey sample family income levels as follows: poor--under $6,000; nonaffluent--$6,000-$10,000; lower affluent--$10,000-$15,000; middle affluent--$15,000-$20,000; upper affluent--higher than middle affluent. For a full explanation please see the Hudson Institute Research Report from which this chapter was taken, Jane Newitt, The Nonaffuent: A Statistical Profile, HI-2224-RR, April 1975

**Other choices are: quite a bit, fair, some, little, and none.

2. Self-damaging Behavior

Studies of poverty in the nineteenth and early twentieth century commonly managed to document, to the author' satisfaction, that a majority of cases of pauperism or low income were attributable to the influence of liquor on health, employment, and family structure. Today, old age is the most common cause of poverty and dependency, and the extent to which alcoholism depresses income is obscured by other factors in an analysis of income groups. Expenditures for alcohol rise regularly with household income. In the Michigan income dynamics panel survey,[*] which distinguishes four income groups between the poverty line and (roughly) median income, the percentage spending nothing on alcohol falls steadily from 68% for the near-poor to 49% for the near-affluent. For the most affluent households, it is 34%; for the very poorest, 73%.

By contrast, the percentage of households spending nothing for cigarettes, while highest for the near-poor (54%), is second-highest for the most affluent (51%), and is 46-48% for the rest of the nonaffluent and the very poor. Expenditures for cigarettes[**] were most commonly $100-300 a year, and the range within the nonaffluent groups which spent this amount (26-35%) is about the same as the range for everyone else. about 13% of nonaffluent households spent $300 or more for cigarettes.

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[*] James M. MOrgan, et. al., Five Thousand American Families: Patterns of Economic Progress (University of Michigan, 1974), Vol. 1, p. 407, 1971 data.

[**] Ibid., p. 406, 1971 data.

These data are corroborated by a more recent Gallup survey,* which likewise showed no income pattern for cigarette use. The nonaffluents and lower affluents were slightly more likely than others to have smoked cigaretts in the past week (42 and 46% vs. a 30 and 40% range for others).

Gallup also ascertained the following income progression for those who described themselves as "not total abstainers from alcoholic beverages": P=42, 49%; NA=58, 64%; A=78, 88%. When the non-abstainers were asked if they sometimes drank more than they should, the "yes" responses correlated somewhat less closely with income, although the UA were in front (25%) compared to a range for others of 11-20%. Interestingly, there was an inverse correlation with income on the third question in this set: has liquor ever been a cause of trouble in your family? Answering affirmatively were: P=21, 16%; NA=16, 11%; A=12, 10, 7%.**

A final type of self-damaging behavior that Gallup has recently treated is failure to use one's seat belt. Three-fifths of upper affluents said they had used a seat belt the last time they were in the car, compared to: P=19, 13%; NA=22, 28%; LA=29%. Few people favored fining non-seatbelt-users twenty-five dollars. The range approving was 18-28%, with the nonaffluents at the top and the poor at the bottom.***

3. Kinds of Disability

In 1972, the lower-nonaffluent group of families was 15% of all families, but 26% of those in which the family head did not work because of illness or disability. This disproportion disappears with the upper-nonaffluent families,[*] who comprise 15% of families of this type but 17% of all families.

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*Gallup Opinion Index, June 1974, p. 21.

**Gallup, June 1974, pp. 17-19.

***Gallup, November 1973, pp. 26-7. UA-$15,000+

More data exist on chronic conditions (e.g., arthritis, heart conditions, orthopedic problems) than on other types of ill health.[**] Nonwhites are less likely to report having such conditions than whites, but there is little difference between nonaffluent and affluent households; for both, 48-49% of whites and 37-38% of nonwhites report one or more chronic conditions, while about twelve and seven percent report three or more. Chronic conditions are heavily concentrated among the poor, afflicting two-thirds of the white poor and 47% of nonwhites, with a third of whites and 17% of nonwhites suffering from three or more such conditions. Among people under age 45, the nonaffluent and the poor are slightly less likely to have chronic health problems than the affluent, but this difference may merely reflect the concentration of nonwhites at lower incomes, and it is, in any case, reversed for the middle-aged and elderly.

Chronic conditions also vary by occupational category within income groups.[***] Among the nonaffluent, 54% each of farm and nonfarm laborers reported no chronic condition, and 50% of operatives and clerical workers. Least healthy by this standard were the nonaffluent farmers (40% with no chronic condition) while all other occupational groups clustered at 46-49%. Among the poor, only nonfarm laborers reported as high as 50% with no chronic condition. Again, the least healthy were farmers (32%), followed by managerial workers (36%) and private household workers (37%). Affluent workers in clerical, operative, and service occupations were most commonly free of chronic conditions (50-52%), farmers were least so (37%), with managers and professional and technical workers at 44-45%.

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[*] CPR, P-60, No. 90, p. 96. Among all nonaffluent "individuals 18 or older, not working for money in 1971, and probably out of school," 14% of NA-L and 9-11% of NA-U were describable as "non-elderly disabled," compared to 36% in households with incomes below 4/10 of the poverty line. Five Thousand American Families, Vol. 1, p. 413; NA-L=1.20-1.99 poverty line; NA-U=2.00=2.99.

[**] PHS Publication No. 1000-Series 10-No. 56, October 1969. Data for July 1965-June 1967. P=Under $3,000; A=$7,000+.

[***] PHS No. 1000-Series 10-No. 21. Data for July 1961-June 1963.

No more than 7% of workers in either affluent or nonaffluent households reported conditions severe enough to limit "major activity" in any occupational category except for farmers (12-14%). In striking contrast, the percentage for the poor was as low as 7% only for clerical workers, with 24% of farmers partially disabled by chronic conditions, 19% of managers, and 11-14% of most other groups of low-income workers. The poor health of farmers at all income levels is presumably related to the fact that their average age is much higher than for other occupations.

Data from the 1973 health survey (see Table C, following chapter) do not differentiate worker/nonworker, but they show the total percentage of persons with limitation of major activity due to chronic conditions to be 11% for nonaffluents, 6% for affluents, and 23% for the poor. The white/nonwhite difference is: P=24/19%; NA=11/8%; A=6/5%. There is little difference by race and sex within or among income groups in the tiny percentage (1-3%) for children under 17, the top percentage being for white and nonwhite poor males. At other ages, the inverse correlation to income is clear, with nonaffluents closer to affluents than to the poor. Much the greatest point spread is for ages 45-64: P=40%, NA=21%; A=11%.

Number of work-days lost per currently employed person (1973, Table F) correlates inversely with income within a very narrow range, the range increasing slightly with age and being much greater for 45-64 year old nonwhite males (P=14, NA=6, A=4%) than for anyone else. Generally speaking, younger nonwhite workers (under 45) have higher absenteeism than whites, even in a tabulation that "controls" for income group, but, with the one exception just cited, this is not true for older workers. Overall, the rates by race are identical, excepting a one-point difference for the poor; and the rates of absenteeism by sex, overall, are entirely identical within the three income groups: P=7, NA=6, A=5. These breakdowns suggest that gross data showing higher absenteeism for nonwhites and women than for whites and men can be "explained" by the concentration of nonwhites and women in lower-paying jobs, where work-loss days tend to be higher in general. Of course, this explanation would be circular if it could be demonstrated that women and nonwhites are paid less on average because they get sick (or "sick") oftener than others, on average, but the direction of causation is obviously much more complex than this.

For school-loss days of children ages 6-16 (1973, Table F), the breakdown by income, race, and sex shows that nonaffluent nonwhites lose slightly less time from school than whites, and this tends to be true for the affluent and poor as well, except that the nonwhite poor females are comparable to the poor white males and females. Nonaffluent children lose less time than poor children, the greatest difference being for white males and nonwhite females, and they lose about the same amount of time as affluent children of their race and sex. The figures for NA are: White males = 5 days/year; nonwhite males = 3 days; white females = 6 days; nonwhite females = 4 days.

Further information on health problems by income group may be inferred from occupational correlates.* For example, the figures cited for work loss are supported by the addendum that annual absenteeism averages 4-5 days for managerial and professional workers, and 7 days for operatives and laborers. Also, using general classifications, chronic conditions are reported by 9% of white collar workers, 11% of blue collar, 14% of service workers, and 21% of those employed on farms. All of the percentages are higher for male than female workers. Among the major specified chronic disorders, only heart conditions show a slightly higher prevalence among white collar than blue collar workers.

Looking again at the more detailed occupational classifications, respiratory and other "acute conditions" are most common among professional and technical workers who average 1.9 per year. The figures for other occupations that tend to be concentrated in a particular income range are: 1.4 for managerial workers, 1.5 for laborers, and 1.7 for operatives.

More recent data on acute conditions per 100 persons (1973, Table D) show an overall nonaffluent rate of 178, compared to 164 for the poor and 183 for the affluent. However, the breakdown by sex shows that the nonaffluent advantage over the affluent accrues entirely to women; and the race breakdown shows that the nonaffluent disadvantage, compared to the poor, is limited to whites.

When age as well as sex and race are differentiated, the healthiest children under age 17 appear to be the poor and nonaffluent nonwhite males

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*PHS source previously cited, 1961-63 data.

(137-139), and the unhealthiest the poor white males (314). For white male children, illness varies inversely with income; for nonwhites, the reverse appears to be true. White female NA children have fewer acute conditions than other female children, while nonwhite female NA children have more than others (although only slightly more than the poor). I have to suspect that these apparent racial contrasts may be influenced by race-related cultural differences in the tendency to notice and report minor ills.

Among younger adults, the number of reported acute conditions varies inversely with income for white males and females, the white NA males being closer to the poor, the white NA females to the affluent. Younger nonwhite NA adult males report many fewer acute conditions than poor ones, and somewhat fewer than affluent ones. Nonwhite NA women ages 17-44, by contrast, report somewhat more acute conditions than poor ones and many more than the affluent.

For middle-aged adults (45-64), the reporting range is smaller than for younger groups. NA whites are apparently less healthy than other middle-aged whites. The opposite is true for NA nonwhites.

Acute conditions decline with age for white males and females in all income groups. They are identical for nonwhite females under age 45, by income group, declining sharply thereafter. Poor nonwhite males apparently have more such conditions as younger adults than as children, but the pattern for NA and A nonwhite males by age is like the white one.

Returning to my older data, on-the-job injury rates per 1,000 workers are highest for nonfarm laborers (306) and lowest for the white collar jobs (range = 25-52). On the other hand, professional and technical workers have a much higher rate of at-home accidents (100) than any other category except for private household workers (155). Other rates are: managerial workers = 65, operatives = 74, nonfarm laborers = 70. The remaining accident category, which includes motor vehicle accidents, shows its highest rate for nonfarm laborers (120) and operatives and clerical workers (111-112); the lowest rates are for sales workers (79), managers (82) and professional and technical workers (93).

4. Infant Mortality

HEW's health surveys for 1964-66 were analyzed to show the socioeconomic breakdown of infant mortality at that time. While the actual rates would be substantially lower today, the comparisons by family income, race, and region may still be reasonably valid.*

Among white families, the lowest infant mortality rates of all were found in the upper nonaffluent group,** where the rate was about 18 deaths per 1,000 live births, compared to 19 for the two affluent groups, 22 for the NA-L, and 27 for the white poor. While rates were given for the black income groups, the small numbers of blacks in some of the income categories suggest that the variations shown may be unreliable. In any case, they are: P = 43, NA-L = 47, NA-U = 22, A = 38, 32. The regional and educational breakdowns within income groups for blacks are also incomplete and erratic and will not be discussed here.

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*Vital & Health Statistics-Series 22-No. 14, DHEW Publication No.(HSM)72-1045, March 1972. The survey only covered legitimate births.

**For this period, the income groups used are P = under $3,000, NA-L = $3-5,000, NA-U = $5-7,000, and A = up to $10,000 and $10,000+. Median income of male-headed families in 1965 = $7,330.

Regionally, the highest infant mortality rates for the NA-L whites were in the South (24); also, only in the South did both nonaffluent groups have higher rates than the affluent. In the Northeast alone, both nonaffluent groups had lower infant mortality rates than the affluent groups (18 and 16 vs. 22 and 20). Also, especially for the NA-L, the Northeast and the West showed markedly lower infant mortality rates in metropolitan areas than outside them, while the reverse was true for the Southern and North Central regions.

Far and away the most interesting statistics on infant mortality of NA families have to do with the variation by educational level of father and mother. While nonaffluence, per se, has little effect on the probability that an infant will die during his first year, the chances of his dying are (or were) roughly doubled for the least compared to the highest educated fathers and mothers. The rates are as follows:

Table 1

NONAFFLUENT INFANT MORTALITY BY PARENTAL EDUCATION, 1964-1966

NA-L ($3-5,000)	Rate by Father's Education	Rate by Mother's Education
8 years or less of school	30	32
8-11 years	24	25
12 years	18	18
13-15 years	18	20
16 or more years	15	--
NA-U ($5-7,000)		
8 years or less	26	32
9-11 years	23	22
12 years	16	16
13-15 years	15	10
16 or more years	13	16

This kind of variation by parents' education does not exist for the most affluent families. Indeed, in relation to the mother's education, the highest mortality rate (22) among UA infants occurs where she has 16 or more years of schooling. Among poor families, the mother's educational level correlates with variation in the infant death rate from 35 for the least educated to 17 for those with some college; for the father's education, the range is from 23 to 34. (Too few fathers or mothers had completed college for these rates to be included for poor families.)

The age at which infants die does not vary greatly by family income. Among white NA-L families, 43% of the deaths occurred within the first day of life, 25% more within the first week, 5% more within the first month, and 27% during the rest of the first year. The distribution was similar for black infant deaths. However, the much higher black NA rates, especially for NA-L families, may be partially explicable in terms of the larger percentage of low birth weight babies born to blacks. For the nonaffluent groups, 7-8% of the white babies and 13-14% of the black babies weighed less than five and a half pounds at birth.

5. Indications of Mental Health

I have not found any information on mental illness or its treatment which distinguishes the nonaffluent from the affluent and poor. Therefore, this discussion deals with the mental state of the relatively normally functioning respondents to the NORC 1974 survey. The questions asked are staples of survey research and the dichotomy they reveal has abundant corroboration from other sources.

Two kinds of questions are asked. One set deals with personal satisfaction. The other is composed of general statements which measure the "anomie" of the respondent: for example, "These days a person doesn't really know who he can count on." Both sets of questions reveal a clear and usually quite regular correlation of optimistic or socially integrated mental state with income. However, people with lower income consistently express a surprisingly high level of satisfaction with various aspects of their personal lives, considering their high rate of agreement with "anomie" statements; e.g., only 3% of nonaffluents describe their marriages as "not too happy," while 78% agree with the statement, "These days a person doesn't really know who he can count on."

Forty-three percent of the nonaffluents generally find life exciting, 54% routine, and 3% dull. Exciting lives rise regularly with income level to 55% for those with household income over $20,000 (UA). Only among the poor do more than 3% find life dull (10%). Satisfaction with the place where one lives, with family life, and with friendships rises with income, except that the upper affluents are consistently a little less satisfied with these aspects of their lives than are those in the $15-20,000 income range (MA). Seven percent of nonaffluents feel little or no satisfaction in their place or city of residence, 5% in their family lives, 3% in their friendships; and the other income categories, including the poor, are similar or lower on all these expressions of dissatisfaction. Specific percentages of nonaffluents expressing very great or great satisfaction are 77% for family life, 71% for friendships, and 42% for residence. This level of satisfaction is similar to those for the LA ($10-15,000), except that 85% of LA and MA respondents express very great or great satisfaction with family life.

The place or city of residence question is singular in that no group shows high satisfaction for a majority (upper affluents = 49%). By contrast, while nonaffluents are the least likely of any income group to describe their marriages as very happy, 62% do so, compared to 81% of the UA and 66-68% of other affluent groups and the poor.

More than four-fifths of nonaffluents and lower-affluents say that their present job is very or moderately satisfying, while 17 and 14% of these groups, respectively, express some or much dissatisfaction, compared to 9% of the MA and 12% of the UA. Percentages describing the job as very satisfying are: P = 41%; NA = 44%; LA = 45%; MA = 52%; and UA = 59%.

On "anomie" questions, the views of nonaffluents are virtually identical with those of the poor in agreement with the following statements, and about five points higher than the lower affluents. In all cases, the percentage for the upper affluents is the lowest for any group:

> These days a person doesn't really know who he can count on (NA = 78%, UA = 63%)
>
> Most public officials aren't really interested in the problems of the average man (NA = 69%, UA = 56%)
>
> In spite of what some people say, the lot of the average man is getting worse, not better (NA = 65%, UA = 42%)
>
> Most people don't really care what happens to the next fellow (NA = 63%, UA = 47%)

On all of these questions except the one relating to public officials, the rate of agreement by the UA is 9-12 percentage points lower than the figure for the MA group.

A greater spread as well as a lower rate of agreement by nonaffluents appears for the statement, "It's hardly fair to bring a child into the world, the way things look for the future." Here 46% of the poor agree, 40% of the nonaffluent, 33 and 31% of the LA and MA, and 20% of the UA. Another pattern is shown for the statement, "You sometimes can't help wondering if anything is worthwhile anymore." On this one, the NA, LA, and MA respondents show a very similar agreement rate (40-44%), and quite different from either the poor (54%) or the UA (28%).

The anomie questions with which the nonaffluent express a low rate of agreement uniformly deal with money and employment. The nonaffluent are slightly more likely (64%) than any other income group to believe that hard work is more important than luck (or an equal combination of the two) in "getting ahead." Only 29% of nonaffluents agree that "Next to health, money is the most important thing in life," compared to P = 39% and UA = 18%; and only 24% agree that, "To make money, there are no right and wrong ways anymore, only easy and hard ways," compared to P = 27% and UA = 15%. However, the survey does confirm a marked income difference in the tendency to have a pessimistic view of the future. Forty-eight percent of nonaffluents agree with the statement, "Nowadays you have to live pretty much for today and let tomorrow take care of itself," compared to 57% of the poor and 24% of upper affluents. However, the most surprising aspect of rate of agreement with this statement may be that the two affluent groups which account for the $10-20,000 range of household income show 40% agreement. Apparently an optimistic orientation toward the future, while a majority characteristic for all but the poor, is singularly concentrated in the wealthiest group by comparison to other attitudes.

B. Medical Care

1. Inequality of Medical Care Utilization*

> "A key figure in my health habits is my personal physician....I see him about twice a week."
>
> Governor Nelson Rockefeller
> quoted in The New York Times
> November 30, 1973

Table A at the end of this chapter indicates that there are only small differences among income groups in average numbers of physician visits per year, and, indeed, that the poor average slightly more visits per year (6) than the nonaffluent or affluent (5). Table B, which shows the percent of the poor, nonaffluent and affluent who experienced one or more short-term hospital stays in the previous 12 months presents an even sharper contrast: P = 14%, NA = 12%, A = 9%.

While such data constitute an important change from the past, they need to be compared to Table C, which shows that 23% of the poor, compared to 11% of the nonaffluent and 6% of the affluent suffer from chronic health disorders of sufficient severity to limit the sufferer's "major activity." These figures are influenced by the very heavy concentration of elderly people in the poor and, to a lesser extent, the nonaffluent households, but Table C shows that the income correlates of chronic conditions are present at all adult age levels. The further breakdown by sex and race within age groups exhibits great uniformity in the inverse correlation of disabling or semi-disabling disorders and income level.

On the other hand, "acute" ills, such as respiratory infections tend to vary their incidence directly with income level. While the poor and nonaffluent averages are again affected by the elderly component, who experience many fewer such afflictions, the general tendency of the poor to have less illness of this kind than the nonaffluent and affluent exists at all age levels except ages 17-44. However, a closer look at the percentages for children under age 17 shows that only the nonwhite children display this pattern. White poor children are sick more often than white nonaffluent and affluent, although there is an apparent sex difference in which the nonpoor income group has the higher illness rate Since nonwhites at all age levels report fewer acute conditions than whites, genetic factors may be involved. However, as discussed earlier, it is also possible that engrained cultural differences lead nonwhites to regard minor illnesses as too trivial to report, that this is especially likely for children's illnesses, and that, for children, tends to be more common among the poor.

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*Data from HEW's 1973 Health Interview Survey. Household income designation are P = under $5,000, NA = $5-10,000, A = $10,000 and over.

Thus the apparently lower rate of acute conditions per hundred persons among nonwhites (e.g., for nonaffluents, 124 versus 187 for whites) does not necessarily connote lesser need for physician care. More obviously, the lower percentage of nonwhites with partially disabling chronic conditions (for nonaffluents, 8% versus 11% for whites; for the poor, 19% and 24%) tends to wash out when the younger age distribution of nonwhites is taken into account. As Table C shows, elderly nonwhites are more prone to such problems than elderly whites (for the nonaffluent, 47 versus 37% for men and 41 versus 34% for women).

In any case, one area of serious income and race discrepancy in medical care utilization is revealed by the 1973 Health Interview Survey. This is dental care, an area where preventive and early treatment is generally recognized to have considerable value, but also an area where there is very little coverage by health insurance. Table 2 on the following page compares the nonaffluent to the poor and to the affluent on the likelihood of having visited a physician or a dentist in the twelve months preceding the survey.

A glance down columns 1 and 3 shows only minor differences in the likelihood of visiting a physician, but column 2 shows a close resemblance of nonaffluent and poor only for the 17-44 age group so far as likelihood of having visited a dentist is concerned.* Nonaffluent children are almost 25% more likely than poor ones to have seen a dentist within the year; the nonaffluent elderly are half again as likely as the poor. However, as column 4 shows, there is an even greater difference, on average, between the nonaffluent and affluent. This difference is more evenly distributed among age groups, although, again, it is least for younger adults.

Tables G and H following the chapter amplify the income group comparisons. Table G shows the sharp rise with income in the ratio of those who have seen a dentist to those who have seen a physician in the previous year, and also the marked racial difference in the ratio, of which more in a moment, within the nonaffluent and especially the affluent income groups. Table H compares income groups with reference to the greater or lesser likelihood that various age groups will have seen a physician or a dentist. For the affluents, there is very little difference by age,

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*The higher ratio for total "under 17" than for any subgroup has been rechecked and correctly reflects the percentages in the table. Such apparent statistical anomalies are often clarified by different breakdowns (e.g., urban-rural location).

Table 2

RATIO OF NONAFFLUENT TO POOR AND AFFLUENT PERCENTAGES WHO HAVE BEEN A PHYSICIAN OR DENTIST IN THE PREVIOUS 12 MONTHS, 1973

	NA:P		NA:A	
	M.D.	DENTIST	M.D.	DENTIST
Total	.99	1.24	.96	.69
Male	.97	1.23	.93	.68
Female	1.00	1.26	.96	.69
White	.99	1.24	.96	.70
Nonwhite	.99	1.17	.92	.81
Under 17 years old: total	1.06	1.23	.91	.63
White males	.99	1.11	.92	.65
Nonwhite males	1.00	1.16	.89	.78
White females	1.03	1.11	.93	.65
Nonwhite females	1.07	1.07	.90	.79
17-44 years old: total	.95	.98	.97	.77
White males	.92	.90	.97	.76
Nonwhite males	1.01	.97	.97	.85
White females	.97	1.02	.99	.79
Nonwhite females	.95	1.00	.94	.84
45-64 years old: total	1.01	1.36	.96	.68
White males	1.00	1.36	.94	.62
Nonwhite males	.92	1.38	.90	.83
White females	1.03	1.34	.95	.72
Nonwhite females	1.00	1.45	.91	.76
Ages 65 and older: total	1.01	1.50	.96	.70
White males	1.02	1.76	.96	.68
Nonwhite males	1.06	1.06	.86	.52
White females	1.03	1.43	.96	.75
Nonwhite females	.98	1.15	.87	.88

except that the elderly are less likely than the middle-aged and younger to have visited a dentist. The nonaffluent and especially the poor, by contrast, show lower physician utilization rates for children than for younger and older adults, and much lower dentist utilization rates. A nonaffluent child is only 81% as likely, a poor child only 65% as likely, as his parents to have been to the dentist within a year. It seems plausible that these differences, and the excess of visits by nonaffluent and especially poor younger adults over older adults, reflect an income-related tendency to let dental problems go until they are severe enough to require tooth extractions, which permanently "solves" the problem.

This pattern is generally more pronounced for nonwhites than for whites, and it is further true that there are only three breakdowns by age, race, and sex within income groups where nonwhite dentist utilization is comparable to white. As shown in Table 3 below, these exceptions are nonaffluent and poor middle-aged males and elderly poor males.

Table 3

RATIO OF WHITES TO NONWHITES WHO HAVE SEEN A PHYSICIAN/DENTIST IN PREVIOUS 12 MONTHS, 1973

	P	NA	A
Total	1.07/1.17	1.07/1.24	1.03/1.43
Under 17 years old			
Males	1.16/1.40	1.14/1.34	1.10/1.62
Females	1.13/1.24	1.09/1.29	1.06/1.59
17-44 years old			
Males	1.12/1.39	1.02/1.29	1.01/1.41
Females	1.01/1.21	1.04/1.23	.99/1.31
45-64 years old			
Male	.92/1.04	1.00/1.03	.96/1.38
Female	.97/1.45	1.00/1.34	.96/1.43
65 and older			
Male	1.04/1.06	1.01/1.76	.90/1.33
Female	.99/1.77	1.04/2.20	.92/2.59
	58/256	34/348	44/466

Table 3 shows that, within a narrow range of differences, nonaffluent whites and nonwhites are most similar in their physician-utilization rates at the higher ages, differing from both the affluent and the poor in that older nonwhites do not tend to be more likely than whites to have seen a physician. The racial differences in dentist utilization rates are striking for children in all three income groups, for the elderly especially in the nonaffluent and affluent groups, and for all age groups among the affluent. Nonaffluents show the least race difference for males in every age group except the elderly, where they show the greatest difference. For females, they occupy the middle or lowest position at all ages.

When I sum the departures from 1.00 for income groups, I find that the total is much smaller for nonaffluents (34) than for the affluent (44) or the poor (58) so far as physician utilization differences by race are concerned. A comparable calculation for dentist utilization differences by race give totals that are, for nonaffluents and affluents, an order of magnitude higher, with the nonaffluents occupying the middle position: P = 256, NA = 348, A = 466. However, the significance of this progression has to be determined in the light of the very substantial income-related differences in white dentist utilization rates, shown in Table 2 and the tables following the chapter.

2. Other Data

A study conducted in Boston in 1969 suggests considerable variation by income level in the type of primary care physicians used. Thirty-six percent of nonaffluents and a similar percentage of the poor saw a general practitioner; only 25% of the affluent did so. Likelihood of seeing an internist rose with income: P = 8%, NA = 12-14%, A= 23%. So did likelihood of seeing an obstetrician-gynecologist: P = 7%, NA = 15%, A = 18-20%.[*]

The earlier PHS survey of occupational groups (1961-63) showed that, among people reporting respiratory and other acute conditions, the percent which had received medical attention did not differ greatly by occupation: for managers it was 71%, for laborers 62%, for professional and technical workers and for operatives, it was 68%. Interestingly, the managerial group was second least prone to such conditions and most likely to consult a physician, while the laborer group was the least prone and the least likely to see a doctor.

Looking at 1969 data,[**] the figures indicate that the poorer you are the less likely you are to be within 15 minutes of a physician (Range = 41-55%). A quarter of the poor, 18% of the nonaffluent, and 16% of the affluent are more than thirty minutes away from a doctor.

Except for the elderly, the nonaffluent in 1970 had relatively low rates of coverage by hospital and surgical insurance.[***] About 70% of those under age 25 were covered, compared to about 80% for the LA. The comparisons for ages 25-44 were 73-75% for the NA, 84-86% for lower-affluents. For those 45-64, the discrepancy was much smaller: 85% vs. 88% for hospital insurance, and 81% vs. 85% for surgical. Among the elderly in 1968, 96-97% of NA and 95-96% of LA reported surgical and hospital coverage.

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[*] Use of Health Care Services in Greater Boston, report of a study conducted under the Survey Research Program of the University of Massachusetts and the Joint Center for Urban Studies of MIT and Harvard University, 1970.

[**] Vital and Health Statistics-Series 10-No. 75, DHEW Publication No. (HSM)72-1064, July 1972.

[***] Telephone information from HEW.

C. Sex and Childbearing

1. Premarital Sex and Childbearing: Attitudes and Behavior

The 1974 NORC survey indicates that 34% of nonaffluents regard premarital sex as always wrong, compared to 24-29% for the affluent income groups and 40% for the poor. On the other hand, a third of nonaffluent and affluent groups and a quarter of the poor regard it as "not wrong at all." However, these differences are very strongly affected by the concentration of elderly people at the lower income levels. If we look at the breakdown of attitudes by age for the under-$6,000 and over-$6,000 household income groups, the similarities become more striking than the differences:

Table 4

ATTITUDES ABOUT PREMARITAL SEX:
NONPOOR AND POOR BY AGE, 1974

	Always wrong		Not Wrong at all	
Age	Under $6K	Over $6K	Under $6K	Over $6K
Under 30	12%	10%	51%	50%
30-49	33	28	24	32
50-69	48	43	15	18
70 and older	66	51	11	18

The age distribution of the two income samples is:

	Under $6K	Over $6K
Under 30	27%	27%
30-49	19	42
50-69	30	27
70 and older	23	4

Similarly, 84% of the poor who are under thirty and 94% of the nonpoor approve of making birth control information available to teenagers, while only 41% of the elderly poor and 52% of the elderly nonpoor do so. (Overall, 81% of the nonaffluent take this position and 63% of the poor.)* The figures for those favoring abortion if the woman is single and does not want to marry the man differ less by age, with a range of 49 to 35% for the poor and of 54 to 48% for the nonpoor. Among the nonaffluent, 41% approve of legal abortion in this case, compared to 36% of the poor and (rising with income) 46 to 53% of the affluent groups.**

Detailed data are available on the rate of premarital births per thousand married women, by income group, date of marriage, and race.*** Among married white women in the NA-L income range at the time of the survey, the premarital birthrate ranged from 31 for those married in the 1930s to 74 for those married between 1965 and 1969. For those in the NA-U income range, the comparable figures were 24 and 58. The rising trend was less marked for white women in poor families, being roughly the same (104 and 106) for those married in the 1940s and the late 1960s.**** While rates generally fell as income rose, women in households with income over $25,000 had a comparable rate to the poor (101) if married in the late 1960s. While this difference between the most affluent and the less affluent and nonaffluent women was most pronounced for women married during the 1960s, it is also present for the earlier-married groups.

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*According to a secondary source, Gallup ascertained in June 1972 that 73% of the public favored making birth control services available to "sexually active" teens. I have not seen this poll..

**See also section 3 below for attitudes on abortion.

***CPR, P-20, No. 263, April 1974.

****Note that income is at time of survey, nor of marriage.

There is no difference between whites and blacks in percentages disapproving of premarital sex, but a great difference exists in the rate of premarital births, although, as was not true for whites, the black rates tended to decline in the late 1960s compared to the early 1960s. The rate for women married in the late 1960s was 481 for the NA-L black families and 543 for the NA-U. This unexpected excess of NA-U over NA-L premarital births also occurs for black women married in the 1940s (NA-L = 157, NA-U = 257) but is reversed for those married during the 1950s (NA-L = 358, NA-U = 252). For all periods, rates were higher for poor black women than for the nonaffluent, and they were generally lower for affluent women. However, the rates for affluent black women, like the white rates, increased during the 1960s.

Generally, premarital births were more common for both blacks and whites in nonmetropolitan areas, and they seem to correlate somewhat more closely with level of education than with income level. While the data on blacks are limited by the small numbers with higher levels of education, there is one breakdown--women married in the 1940s who had one or more years of college--where the black rate is roughly the same as the white (28 vs. 24).

2. Post-marital Births

For the NA-L and NA-U families, the birthrate within the first year of marriage for white women married between 1965 and 1969 is 428/1,000 and

392 respectively, compared to 452 for women in poor families and 175 for the most affluent. This last is an extraordinary drop from a rate of 344 for highly affluent white women married during the 1960-64 period, and it is lower even than the rate for such women who were married in the thirties. Both of the nonaffluent rates remain well above those for women married in the thirties who are today in the nonaffluent income groups.

If the figures are to be believed, large numbers of black women have more than one baby during the first year of marriage. The rate for NA-L black women married in the late 1960s is 1,038; for NA-U black women 933. This most recent black marriage cohort is the only one in which nonaffluent women average more births in the first year than the poor, whose rate is 924.

Looking at the cohorts that have been married for 20 years, total births are greater for whites of more recent marriage at all income levels. The NA-L women who were married in the 1930s have averaged 2.7 births, the NA-U 2.5, while the figures for those married in the 1950s are 3.3 and 3.1 respectively. The limited data on black women show that both nonaffluent groups who were married in the 1950s have averaged 3.8 children. However, black women in families with income of $15,000 and over who were married in the 1950s have had fewer children than comparable white women (2.3 vs. 3.0).

Husband's occupation has a marked relation to family size. For women ages 35-44, a group who have largely completed their families, the average number of children ever born is highest for farm workers (4.0), laborers (3.6), operatives (3.3), and service workers (3.3). The lowest averages occur where the husband is a clerical worker (2.7), the next lowest where he is a sales worker, manager, or professional or technical worker (2.9). For all groups, these figures are higher in 1971 than for women of this age in 1960, despite the birth-rate decline.

The NORC 1974 survey indicates that the nonaffluent (27%) and the poor (28%) female respondents are most likely to say they have never borne any children, compared to 21% of the lower affluents and 18 and 17 percent of the higher affluent groups. The nonaffluent women are also most likely to have had one child: 20% compared to 10% of the most affluent women and 14-16% of the less affluent and the poor. This reflects the concentration of the very youngest families in the nonaffluent group. Conversely, the nonaffluent and the poor (19%) are least likely to have had two children (affluent range = 23-27%). Two children is the most common number for the three affluent groups, although three is nearly as common (24%) for the UA.

Among nonaffluent women, 15% have had three children, 9% four, 6% five, and 6% six or more. The poor and the most affluent are most likely (8%) to have had five children, and the 14% of poor women who have had six or more vastly exceeds the 3% for the most affluent.* (Forty-two percent of the poor** married before age 20, compared to 19% of the UA. The percentages for the rest of the affluents and the nonaffluent are 29-33%.)

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*On a breakdown by ethnicity, median family income rises with family size up to the seven-person level except for families of Spanish origin and an "other" category which includes blacks. Among the ethnic groups with enough families with 7+ members to be tabulated, the Irish and French show higher median income for these families than for those with six members. Median income for Irish-origin families of 7+ members was $14,388 in 1971, compared to $13,208 for comparable Italian families, $12,918 for German, $12,856 for English, and $8,285 for Spanish. CPR, P-20, No. 249, p.26.

**Men and women.

3. Attitudes

Among nonaffluents in 1974, 25% expected to have more children, a figure that declines with income to 15% for the UA. Within the $6-20,000 income range, an identical proportion (48%) regard a two-child family as ideal, compared to 36% for those poorer and 51% for the most affluent. The middle and upper affluent groups are slightly more likely than the nonaffluents and poor to consider a three-child family ideal (26-30% vs. 23%). Only 13% of nonaffluents prefer four children, compared to 20% of the poor, 10% of the most affluent and 17 and 14% of the lower and middle affluent groups.*

As mentioned earlier, income differences on questions related to sex are often greatly influenced by the concentration of the elderly at the lower income levels. This may explain many differences between NA and LA responses. The percentages which follow will show the NA ($6-10,000) and the LA ($10-15,000) income groups, separated by a diagonal (/), with the upper affluent (UA) response given for reference.

Sex education in the schools is favored by 79/85% (UA = 91%), and the dissemination of birth control information to whoever wants it by 92/94% (UA = 95%). Those favoring giving birth control information to teenagers are 81/83% (UA - 88%).

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*These are NORC figures. A Gallup poll at about the same time showed a similar range on the two-child preference, but the NA (38-40%) were closer to the poor. This is readily explicable in terms of the lower NA cut-off point (for Gallup data, $5,000; for NORC $6,000). Regarding four children as ideal on the Gallup poll were: P = 32, 27%; NA = 24, 21%; A = 12, 14, 11%. Gallup Opinion Index, May 1974, p. 28. All of these data reflect great attitude changes since the mid-1960s, and there is no particular reason to be certain these changes will persist. The long-term Gallup picture on percentage regarding a four-child family as ideal has been: 1936=34%, 1941=41%; 1945=49%; 1953=41%; 1957=38%; 1960=45%; 1963=42%; 1966=35%; 1967=40%; 1973=20%. Gallup Opinion Index, February 1973.

Sex before marriage seems "always wrong" to 34/29% (UA = 25%), but adultery seems always wrong to 72/72% (UA = 65%) and homosexuality to 70/67% (UA = 56%). Those who think that pre-marital sex is only sometimes or not at all wrong are 53/59% (UA = 63%). These levels of tolerance are accorded to adultery by 16/12% (UA = 15%) and to homosexuality by 20/21% (UA = 34%).

Attitudes toward legal abortion vary with the reasons for it. Most commonly approved reasons are serious health danger to the woman: 87/91% (UA = 95%); rape: 81/84% (UA = 92%); and probable serious birth defect: 80/85% (UA = 87%). Where the reason is that the family has a very low income and cannot afford another child, 50/54% (UA = 63%) approve, while only a minority favor legal abortion if the woman is not married and does not want to marry the man: 43/49% (UA = 62%); or where she is married and doesn't want any more children: 41/46% (UA = 58%).

Looking at the over-$6,000 income households as a whole, the age range of responses on the six abortion questions is 10 points or less except for the case of a probable serious birth defect, where 88% of the youngest and 65% of the oldest group approve. For under-$6,000 incomes, the age range on responses is less than 15 points on all but two questions. Where the issue is low income and inability to afford another child, 57% of the under-30 poor approve of abortion but only 39% of the elderly. The range is even greater where the case is the woman who is married but does not want another child: 51% to 24%.

On the more general question of whether abortions through the third month of pregnancy should continue to be legal, the most recent Gallup inquiry showed 51% of the public approving, but no income group below $10,000 gave a majority: P = 38%; NA = 42, 47%; A = 52, 64, 62%. Other breakdowns of interest are: white = 53%, nonwhite = 40%; men = 54%, women = 48%; and Protestants = 52%, Catholics = 41%.

An earlier Gallup poll showed that a majority of all but the poorest respondents had heard or read about "the voluntary male sterilization operation." This majority included 59 and 64% of nonaffluents and 71 and 75% of affluents. Of those answering yes to this question, almost half of P and NA respondents approved of the operation, and 56 and 62% of the affluent groups.*

4. Government Spending and Repute of the Medical Profession

Sixty-four percent of nonaffluents believed in 1974 that our government is spending too little on improving and protecting the nation's health. (This compares to 51% holding this view of educational expenditures.) Four percent think that expenditures are excessive, and 29% that they are about right. The affluent groups are slightly more likely (66-68%) to regard expenditures as too low, and the poor are slightly less likely (60%).

As on other polls (which also show the percentage declining), the NORC data show Americans more inclined to express a great deal of confidence in the people running "medicine" than in other leadership groups. Among income groups, the nonaffluent are the most likely to have such faith (64%), while the poor and the most affluent are least likely (58-59%). Expression of "hardly any" confidence is rare: 7% of the poor and 3-5% of others. (It is interesting that when Gallup, in 1969, inquired about American expectations for 1990, many more people expected a cure for cancer--P = 65, 63%; NA = 69, 77%; A = 77, 83%--than thought that the standard of living would be doubled: P = 39%; NA = 47, 42%; A = 42%. Also, about a quarter of the public thought that life expectancy would reach a hundred years by then: P = 25, 21%; NA = 22, 31%; A = 26, 32%.)*

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*Gallup, October 1970, p. 20.

On another poll conducted by Gallup for Potomac Associates in 1972,** the NA-L and the poor were both least likely to have a great deal of personal confidence in their ability to obtain good health care and least likely to "sometimes get the feeling that there is a general 'health crisis' in the U.S. that will require some basic changes in how medical services are made available to the public." However, the range of attitudes on the second question was quite small: NA-L = 57% agreement, affluent groups = 63%, NA-U = 65%, and P = 60%. High confidence in ability to obtain good medical care differentiated the most affluent (58%) from all the rest (Range - 39-45%).

On the same poll, all income groups except the poor regarded the doctor shortage as the country's number one medical problem. (The poor chose "costly and complicated insurance.") Listed number two by the NA-L and the poor was "Doctors refuse to make house calls." This probably reflects a large elderly vote. Second for the NA-U were (tied) costly and complicated insurance and the raising of costs by unnecessary treatment. These two items were also, respectively, the second choices of the lower and upper affluent groups. Interestingly, only the $15,000+ income respondents listed as one of their top five criticisms of the system that "only those who can afford it get the good medical treatment."

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*Gallup Opinion Index, December 1969, pp. 21-22.

**Stephen P. Strickland, U.S. Health Care: What's Wrong and What's Right, 1972.

D. Benefits from Government Programs

1. Medicare and Medicaid

In 1970, Medicare benefits totaled $7.5 billion. According to a Brookings Institution analysis, the nonaffluent ($5-10,000) received 26% of these benefits, the affluent 21%, and the poor 54%. (Of course, many of these "poor" households were quite small, with incomes above the poverty line for such households.) In the same year, Medicaid payments totaled $2.9 billion. Two-thirds of these went to low-income families, 24% to nonaffluents, 9% to affluents. My guess would be that the "affluent" beneficiaries would have had to be quite large families to be eligible.

Finally, there was a $3.8 billion "subsidy" of medical care by means of income tax deductions.* Thirteen percent of this gain went to the poor, 31% to the nonaffluent, 56% to the affluent (including 30% to the $15,000+ families). Combining the three benefit categories, Americans under age 65 received the following percentages of Federal medical care payments and subsidies: P = 29%; NA = 26%; LA = 23%; MA/UA = 22%. For those 65 and over, the distribution was: P = 55%; NA = 27%; LA = 12%; MA/UA = 17%.

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*Charles Schultze, et al., Setting National Priorities, the 1974 Budget, The Brookings Institution, 1973, p. 112.

2. Food Stamps and Food Distribution*

The source cited offers a percentage distribution of food stamps and food distribution program benefits by monthly net income, distinguishing cash income and imputed value for a number of in-kind benefits, primarily housing and medical programs and subsidized school meals. Looking only at cash income, 25.7% of households receiving food stamps had monthly net income of $300 or more (i.e., after-tax cash income of $3,600 or more annually) in 1973. Of these households, about 3% had monthly cash income of $600 or more after taxes, 10% had $400-600, and 12% had $300-400. These percentages are greatly increased if in-kind income is included. We then find that 13% of food stamp recipients had monthly incomes of $600 or more, 19% had $400-600, and 17% had $300-400, for a total of 49%. The average net annual income, including in-kind income, for food stamp recipients was $4,362 in 1973; earnings accounted for only 20% of this income.

People who received foods distributed by the government had a very similar income distribution. Those with monthly cash income after taxes of $300+ were 28% of all benefiting households, and those with total net income in this range were 51% of benefiting households. About 5% of all participating households had net cash income of $600 or more, and about 15% had net total income this high.

Of all households receiving food stamp benefits, 44% lived in central cities, compared to 24% of the food-distribution recipients.

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*National Survey of Food Stamp and Food Distribution Program Recipients: A Summary of Findings on Income Sources and Amounts and Incidence of Multiple Benefits, Paper No. 17, Studies in Public Welfare, prepared for the Subcommittee on Fiscal Policy of the Joint Economic Committee, Congress of the U.S., December 31, 1974, p. 9.

Blacks were 37% of food stamp households, and 23% of food-distribution households. Among the food stamp households, whites had the lowest average total net incomes and Spanish-origin households the highest. Almost two-thirds of the food stamp households and 54% of the food distribution households were female-headed. Female-headed households accounted for three-quarters of those receiving food stamps, with a head ages 18-34. About 27% of food stamp households and 38% of food distribution households were headed by someone 65 or older, and a majority of these heads were women. In both programs, black households were more likely than white to be headed by a woman: 70 vs. 60% for the food stamp program, 58 vs. 50% for food distribution. Fifteen percent of all adults in food stamp households were retired, and 55% were not retired but not in the labor force. Nine percent were in the labor force but unemployed, 10% were employed part-time, and 11% were employed full-time. Figures for food distribution recipients were virtually identical. Among adults who were not receiving public assistance, 24% of food stamp recipients were working full-time, 27% part-time, and 23% were unemployed. Percentages employed were higher for blacks than whites.

Table A

U.S. HEALTH SURVEY DATA, 1973[*]

	P	NA	A
No. of physician visits per person per year			
Total	6	5	5
Male	5	4	4
Female	6	5	6
White	6	5	5
Nonwhite	5	4	5
Under 17 years old: total	4	4	5
White male	5	4	5
Nonwhite male	3	3	3
White female	4	4	4
Nonwhite female	3	3	3
17-44 years old: total	6	5	5
White male	4	4	4
Nonwhite male	2	3	4
White female	7	6	7
Nonwhite female	8	6	6
45-64 years old: total	7	6	5
White male	6	6	5
Nonwhite male	6	4	5
White female	6	6	6
Nonwhite female	9	6	7
Ages 65 and over: total	7	7	7
White male	6	6	7
Nonwhite male	8	8	--
White female	7	7	7
Nonwhite female	6	8	(Total nonwhite = 9)

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[*] P = Under $5,000 household income, NA = $5-10,000, A = $10,000+.

Table B

U.S. HEALTH SURVEY DATA, 1973

	P	NA	A
% of persons with 1 or more short-stay hospital episodes in the previous 12 months			
Total	14%	12%	9%
Male	12	9	8
Female	15	14	11
White	15	12	9
Nonwhite	12	9	9
Under 17 years old: total	7	5	5
White male	9	6	6
Nonwhite male	5	5	5
White female	7	5	5
Nonwhite female	7	4	5
17-44 years old: total	16	15	11
White male	9	9	7
Nonwhite male	11	6	8
White female	19	20	15
Nonwhite female	24	18	17
45-64 years old: total	15	13	11
White male	18	13	11
Nonwhite male	15	11	9
White female	15	14	11
Nonwhite female	12	11	11
Ages 65 and older: total	18	16	16
White male	19	17	16
Nonwhite male	16	--	--
White female	17	16	17
Nonwhite female	14	--	--
Total nonwhite	15	15	--

Table C

U.S. HEALTH SURVEY DATA, 1973

	P	NA	A
% of persons with limitation of major activity due to chronic conditions			
Total	23%	11%	6%
Male	26	11	6
Female	21	10	6
White	24	11	6
Nonwhite	19	8	5
Under 17 years old: total	3	2	2
White male	3	2	2
Nonwhite male	3	2	--
White female	2	2	1
Nonwhite female	2	--	--
17-44 years old: total	10	6	4
White male	11	7	4
Nonwhite male	13	6	4
White female	8	5	4
Nonwhite female	12	7	4
45-64 years old: total	40	21	11
White male	54	24	11
Nonwhite male	52	20	13
White female	32	19	11
Nonwhite female	40	17	13
Ages 65 and older: total	43	36	30
White male	51	37	27
Nonwhite male	58	47	45
White female	36	34	30
Nonwhite female	50	41	51

Table D

U.S. HEALTH SURVEY DATA, 1973

	P	NA	A
No. of acute conditions per 100 persons			
Total	164	178	183
Male	161	179	176
Female	166	177	192
White	171	187	187
Nonwhite	144	124	134
Under 17 years old: total	234	248	262
White male	314	281	270
Nonwhite male	137	139	182
White female	286	252	268
Nonwhite female	179	187	144
17-44 years old: total	209	177	170
White male	188	184	156
Nonwhite male	181	97	118
White female	243	192	189
Nonwhite female	179	132	143
45-64 years old: total	101	109	105
White male	91	106	97
Nonwhite male	---	---	---
White female	112	123	115
Nonwhite female	---	---	---
Total nonwhite	87	62	86
65 and older: total	90	91	93
White male	82	96	77
White female	97	86	104
Total nonwhite	79	--	---

Table E

U.S. HEALTH SURVEY DATA, 1973*

	P	NA	A
% of persons with physician/dental visit(s) in previous 12 months			
Total	74/33%	73/41%	76/59%
Male	70/31	68/38	73/56
Female	77/34	77/43	80/62
White	75/34	74/42	77/60
Nonwhite	70/29	69/34	75/42
Under 17 years old: total	66/31	70/38	77/60
White male	73/35	72/39	78/60
Nonwhite male	63/25	63/29	71/37
White female	69/36	71/40	76/62
Nonwhite female	61/29	65/31	72/39
17-44 years old: total	79/48	75/47	77/61
White male	73/50	67/45	69/58
Nonwhite male	65/36	66/35	68/41
White female	85/52	83/53	84/67
Nonwhite female	84/43	80/43	85/51
45-64 years old: total	71/28	72/38	75/56
White male	66/25	66/34	70/55
Nonwhite male	72/24	66/33	73/40
White female	73/32	75/43	79/60
Nonwhite female	75/22	75/32	82/42
Ages 65 and older: total	76/20	77/30	80/43
White male	71/17	73/30	76/44
Nonwhite male	68/16	72/17	84/33
White female	79/23	81/33	83/44
Nonwhite female	80/13	78/15	90/17

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*P = Under $5,000 household income, NA = $5-10,000, A = $10,000+.

Table F

U.S. HEALTH SURVEY DATA, 1973

	P	NA	A
No. of work-loss days per currently employed person			
Total	7	6	5
Male	7	6	5
Female	7	6	5
White	6	6	5
Nonwhite	7	6	5
Ages 17-44: total	7	6	5
White male	5	6	4
Nonwhite male	9	7	7
White female	7	6	5
Nonwhite female	10	9	8
Ages 45-64: total	8	7	5
White male	8	8	5
Nonwhite male	14	6	4
White female	6	7	6
Nonwhite female	6	-	6
No. of school-loss days per person ages 6-16 per year			
Total	7	5	5
White male	9	5	4
Nonwhite male	4	3	4
White female	8	6	5
Nonwhite female	9	4	3

Table G

RATIO OF % WHO HAVE SEEN A DENTIST TO % WHO HAVE SEEN A PHYSICIAN IN THE PREVIOUS 12 MONTHS, 1973

	P	NA	A
Total	.45	.56	.78
Male	.44	.56	.77
Female	.44	.56	.78
White	.45	.57	.78
Nonwhite	.41	.49	.56
Under 17 years old: total	.47	.54	.78
White males	.48	.54	.77
Nonwhite males	.40	.46	.52
White females	.52	.56	.82
Nonwhite females	.48	.48	.54
17-44 years old: total	.61	.63	.79
White males	.68	.67	.84
Nonwhite males	.55	.53	.60
White females	.61	.64	.80
Nonwhite females	.51	.54	.60
45-64 years old: total	.39	.53	.75
White males	.38	.52	.79
Nonwhite males	.33	.50	.55
White females	.44	.57	.76
Nonwhite females	.29	.43	.51
Ages 65 and over: total	.26	.39	.54
White males	.24	.41	.58
Nonwhite males	.24	.24	.39
White females	.29	.41	.53
Nonwhite females	.16	.19	.19

Table H

% WHO HAVE VISITED A PHYSICIAN OR DENTIST IN THE PREVIOUS 12 MONTHS: RATIOS OF ADJACENT AGE GROUPS

	P	NA	A
Under 17 to 17-44			
Visited a physician	.84	.93	1.00
Visited a dentist	.65	.81	.98
17-44 to 44-64			
Physician	1.11	1.04	1.03
Dentist	1.71	1.24	1.09
45-64 to 65 and older			
Physician	.93	.94	.94
Dentist	1.40	1.27	1.30
NONWHITES			
Under 17 to 17-44			
Visited a physician	.81	.86	.92
Visited a dentist	.68	.77	.83
17-44 to 44-64			
Physician	1.04	1.06	1.00
Dentist	1.74	1.18	.89
44-64 to 65 and older			
Physician	.99	.93	.89
Dentist	1.64	2.06	1.78

Comments: Age-related differences in likelihood of having seen a physician at least once in the year are very small for nonaffluents and affluents, except that nonwhite nonaffluent children (like white and nonwhite poor children) are less than .9 times as likely as younger adults of their race to have done so.

Age-related differences in the likelihood of having visited a dentist are more pronounced for nonaffluents than for affluents in general but considerably less pronounced than for the poor. The exception is for middle-aged compared to elderly nonwhites, the former, if nonaffluent, being twice as likely as the latter to have visited a dentist, compared to 1.8 times as likely for middle-aged vs. elderly affluent nonwhites, and 1.6 times as likely for the poor.

HEALTH

"Medicaid: Costs, Coverage and Selected Issues"

by

Esther Adam

This chapter was originally issued as a Hudson Institute Paper under the title Initial Stipulations of the Medicaid Program, HI-1956-DP, Dated March 1, 1974.

MEDICAID: COSTS, COVERAGE AND SELECTED ISSUES

The "Medicaid" program, as we have come to know it, was first enacted in 1965 as Title XIX of the Social Security Amendments and became effective in 1966. It was originally seen as a major step towards broadening medical coverage for a majority of the poor. Before delving into the specifics of the program, let's take a brief look at the original regulations, in a simplified form. As with many Federal programs, the Medicaid regulations are clothed in complicated lingo.

It is basically a federal-state program with grants administered (prior to January, 1974) by the Social and Rehabilitation Service in the Department of Health, Education and Welfare. Because of the federal-state nature of the program, there are in essence 53 different programs (Arizona excepted); also, this federal-state relationship accounts in part for the lack of very recent data--since data must pass through many channels before it's made public. The following are the main points of the legislation, as enacted in 1965:

> "(1) It substituted a single program of medical assistance for the vendor payments under the categorical cash assistance and Medical Assistance for the Aged programs, with a requirement that beginning in January, 1970 Federal sharing in vendor payments would be provided only under the medicaid program;
>
> (2) It offered all States a higher rate of Federal matching for vendor payments for medical care;
>
> (3) It required each State to cover all persons receiving or eligible to receive cash assistance;
>
> (4) It permitted States to include medically needy blind, disabled, and dependent children and their families (as well as the medically needy aged) at the option of the States; and

(5) It required that States include in-patient and out-patient hospital services, other laboratory and x-ray services, skilled nursing home services, and physicians' services, and permitted other forms of health care at State option."*

What do the above points mean in terms of actual implementation? In terms of federal contribution (item 2), a standard was devised that allowed a minimum of 50 percent to 83 percent federal contribution "based on a formula which takes into consideration the state's per capita income. The federal government also pays 75 percent of the costs of compensating and training skilled professional medical personnel and the staff directly supporting such personnel of public agencies and 50 percent of other necessary administrative costs. States may also claim 50 percent of costs of administration of medicaid benefits to groups, such as general assistance recipients, whose medical care costs under the state plan are wholly met from State funds."**

Points three and four became a major point of discussion as the program evolved. As the wording indicates, it was a requirement to include all persons receiving public assistance under the OAA, APTD, AFDC and AB programs. And, in terms of point four, it was optional to include the "medically needy." The term "medically needy" came to mean that persons were eligible for medical assistance if they met the requirement of being "categorically related," i.e., blind, old, disabled, or a female-headed family with dependent children, or if they met the requirement of being

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*U.S., Congress, Senate, Medicare and Medicaid. Problems, Issues and Alternatives, (Washington, D.C.: Government Printing Office, 1970), pp. 41-42.

**Ibid., p. 201.

"non-categorically-related," i.e., any child under 21 regardless of his family status or individuals between the ages of 21-65 whose level of income (as defined by each state) was insufficient to meet medical care costs.* The following chart will illustrate the variety of income limits for the "medically indigent" by selected states for a family of four; note the limit of New York State:

Annual income limits for medicaid benefits and annual medicaid cost per AFDC family for selected States

State	Maximum income for initial eligibility for a medically indigent family of 4 [2]	Average medicaid cost per AFDC family, 1970-71
California	$3,660	$876
Colorado	2,820	344
Florida	1,606	334
Georgia	1,788	394
Illinois	3,600	908
Indiana	2,100	553
Iowa	2,916	692
Massachusetts	4,176	738
Michigan	3,696	700
Mississippi	(1)	89
Missouri	(1)	335
New Jersey	(1)	491
New York	5,000	970
North Carolina	(1)	503
Pennsylvania	4,000	610
Texas	(1)	640
Vermont	3,828	668
Washington	4,260	484

[1] State offers medicaid only to cash assistance recipients.
[2] Recipients of AFDC may receive full medicaid benefits as long as they receive any AFDC payment. Because of the various disregards and work incentive provisions in AFDC, working recipients may receive AFDC—and hence medicaid—at total income levels well above those shown here.

Source: Col. 1. U.S. Department of Health, Education, and Welfare, Social and Rehabilitation Service, Assistance Payments Administration, Division of Program Evaluation, "Income Levels for Medically Needy in Title XIX Plans in Operation, as of Dec. 31, 1971" (March 1972), and table 1.
Col. 2. Unpublished tabulation, Office of Assistant Secretary for Planning and Evaluation, Department of Health, Education, and Welfare, Mar. 10, 1972.

SOURCE: U.S. Congress. Joint Economic Committee. Studies in Public Welfare. Paper No. 7, "Issues in the Coordination of Public Welfare Programs," 1973, p. 92.

This definition of "medically needy" and the fact that funds were available at state option, automatically ruled out many poor persons and

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*U.S., Congress, Joint Economic Committee, Studies in Public Welfare, Paper No. 8, "Income-Tested Social Benefits in New York: Adequacy, Incentives and Equity," by Blanche Bernstein, (Washington, D.C.: Government Printing Office, 1973), pp. 52-53.

and families. Originally, the financial requirement was met by what is referred to in the literature as the "spenddown."* That is, all money spent on medical care was disregarded in determining eligibility. This aspect of eligibility was later changed by legislative amendment.

Item 5 indicates the required services States must provide in order to qualify for federal monies. In addition, optional services could be provided through federal money, such as prescribed drugs, dental services, eyeglasses, physical therapy, private duty nursing and family planning services; the chart on the following page indicates the wide variety of services available by State.

Note the wide variety of services provided by such states as Connecticut (50), Illinois (50), New York (50), California (50), Massachusetts (50), Minnesota (57), Nebraska (58), Utah (70), for the "medically indigent," vs. States that offer services only for public assistance recipients such as Oregon (57), Indiana (55), Maine (69), Montana (67), South Dakota (70), West Virginia (77). The numbers in parentheses indicate the rate of Federal reimbursement.

Amendments to the Original Legislation

In 1967, partially due to the increasing burden of Medicaid costs (funds were available on an open-ended basis), the Medicaid law was amended. The section causing a furor was that which limited funds to the "medically needy" recipient. Funds were limited to those families whose income did not exceed 133 1/3 percent above the state maximum for

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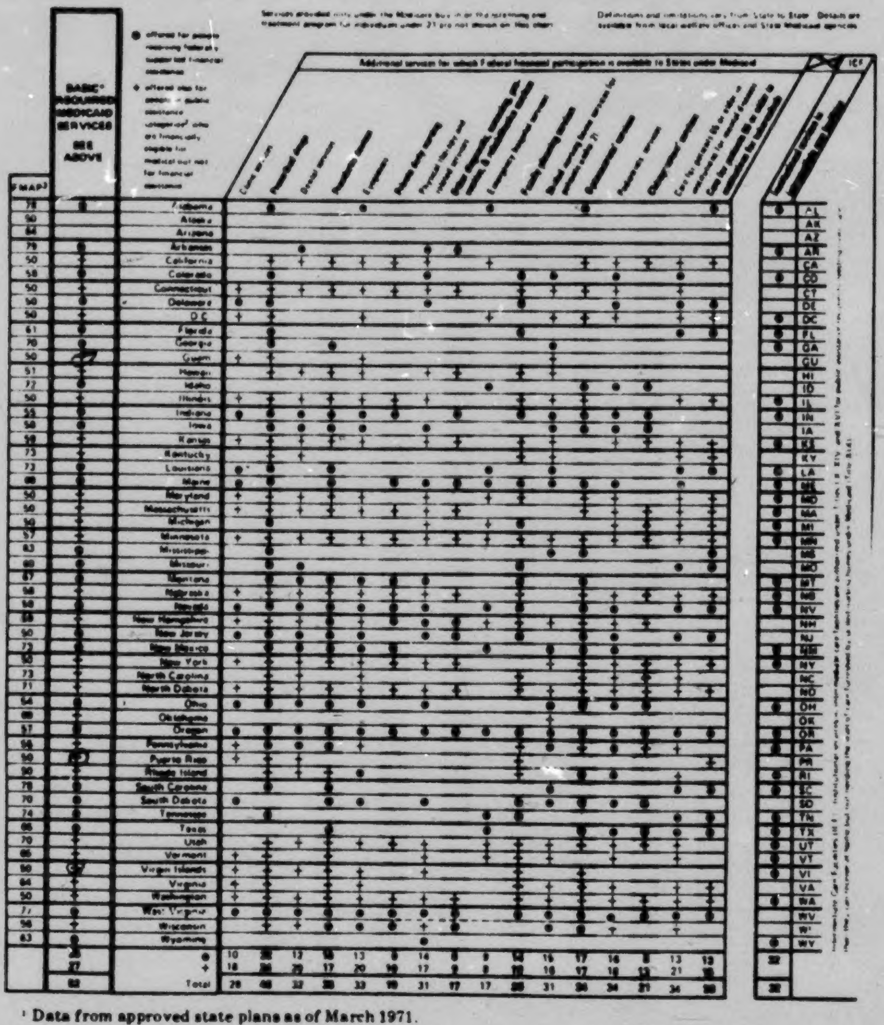
*Howard Newman, "Medicare and Medicaid," The Annals 399 (January 1972): p. 116.

[illegible]

MEDICAID SERVICES STATE BY STATE, MARCH 1971[1]



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[1] Data from approved state plans as of March 1971.

[2] People qualifying as aged, blind, disabled, or members of families with dependent children (usually families with at least one parent absent or incapacitated).

[3] FMAP-Federal Medical Assistance Percentage: Rate of Federal financial participation in a State's medical vendor payment expenditures on behalf of individuals and families eligible under Title XIX of the Social Security Act. Percentages effective from July 1, 1971, through June 30, 1973, are rounded.

SOURCE: U.S. Congress. Joint Economic Committee. Studies in Public Welfare. Paper No. 2., "Handbook of Public Income Transfer Programs.", p. 209.

the public assistance recipient of AFDC of a similar size.[*] Funds were still available for the public assistance recipient.

The amendments also made changes in the required and optional services that would be provided. In addition to the initial five required services, two other services were added: home health services and "early and periodic screening and diagnosis for those eligible under the plan and child screening or any seven of the services previously categorized as required or optional."[**] The 1972 amendments stipulated that "premium, co-payment and deductible requirements"[***] be set up which, it was hoped, would reduce the allocations to the poor by about $1.3 billion in 1974. Federal expenditures alone, it was estimated, would be reduced by about $715 million.[****]

Initial Effect of the Medicaid Program: Facts and Figures

Initially, two states, New York and California were among the first to qualify for Medicaid funds. Along with Massachusetts and Michigan, they accounted for less than one-quarter of the poor population during 1967-68, and expended 2/3 of the federal funds during the same period. The entire Northeast, the most affluent region, "exceeded the low-income South by more than $530 for each poverty household."[*****] In 1969, New York and California dominated the funds; of the $4.4 billion expended, New York and California accounted for over 47 percent of the federal expenditures.[*]

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[*] U.S., Congress, Medicare and Medicaid, p. 42.

[**] U.S., Congress, Studies in Public Welfare, Paper No. 8, p. 54.

[***] Charles Schultze, Setting National Priorities. The 1974 Budget, (Washington, D.C.: Brookings Institution, 1973), p. 117.

[****] Ibid., p. 117.

[*****] Bruce Stuart, "Equity and Medicaid," The Journal of Human Resources 7 (Spring 1972), p. 172.

One of the trends in the Medicaid program was the constant discrepancy between the projected estimate for a fiscal year and the actual expenditures. For example, the President's budget as of January 1, 1967 predicted that the program would cost the federal government $2.25 billion in fiscal year 1968 with 48 states participating. By January, 1968, the cost estimate changed to $3.41 billion with only 37 states participating; the actual cost for FY 1968 (federal) amounted to $3.54 billion with 37 states enrolled in the program. In FY 1969, federal costs amounted to $2.3 billion--50 percent more than the HEW estimate.[**]

In short, the federal, state and local expenditures under Medicaid increased from $1.7 billion in fiscal year 1966 to $6.5 billion in 1971.[***] The following two charts illustrate the expenditures of the Medicaid and Medicare programs from 1966-1971, plus the estimated figures for 1972 and 1973:

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[*] U.S., Congress, Joint Economic Committee, *Studies in Public Welfare*, Paper No. 7, "Issues in the Coordination of Public Welfare Programs, (Washington, D.C.: Government Printing Office, 1973, p. 218.

[**] U.S., Congress, *Medicare and Medicaid*, p. 42.

[***] Charles Schultze *et al.*, *Setting National Priorities. The 1973 Budget*, (Washington, D.C.: Brookings Institution, 1972), p. 218.

Government health expenditures for medicare and medicaid, fiscal years 1966-67 through 1970-71

[In billions of dollars]

Fiscal year	Medicare			Medicaid
	Total	HI	SMI	
1966-67	3.4	2.6	0.8	2.2
1967-68	5.4	3.8	1.5	3.6
1968-69	6.6	4.8	1.8	4.4
1969-70	7.1	5.0	2.2	5.0
1970-71	7.9	5.6	2.3	6.5

Source: U.S. Department of Health, Education, and Welfare, Social Security Administration, "National Health Expenditures, 1929-70," by Barbara S. Cooper and Dorothy P. Rice, *Social Security Bulletin*, XXXIV, No. 1 (1971).

U.S. Department of Health, Education, and Welfare, Social Security Administration, "5 Years of Medicare—A Statistical Review," by Howard West, *Social Security Bulletin*, XXXIV, No. 12 (1971).

SOURCE: U.S. Congress. Joint Economic Committee. Studies in Public Welfare. Paper No. 7, "Issues in the Coordination of Public Welfare Programs," 1973, p. 88.

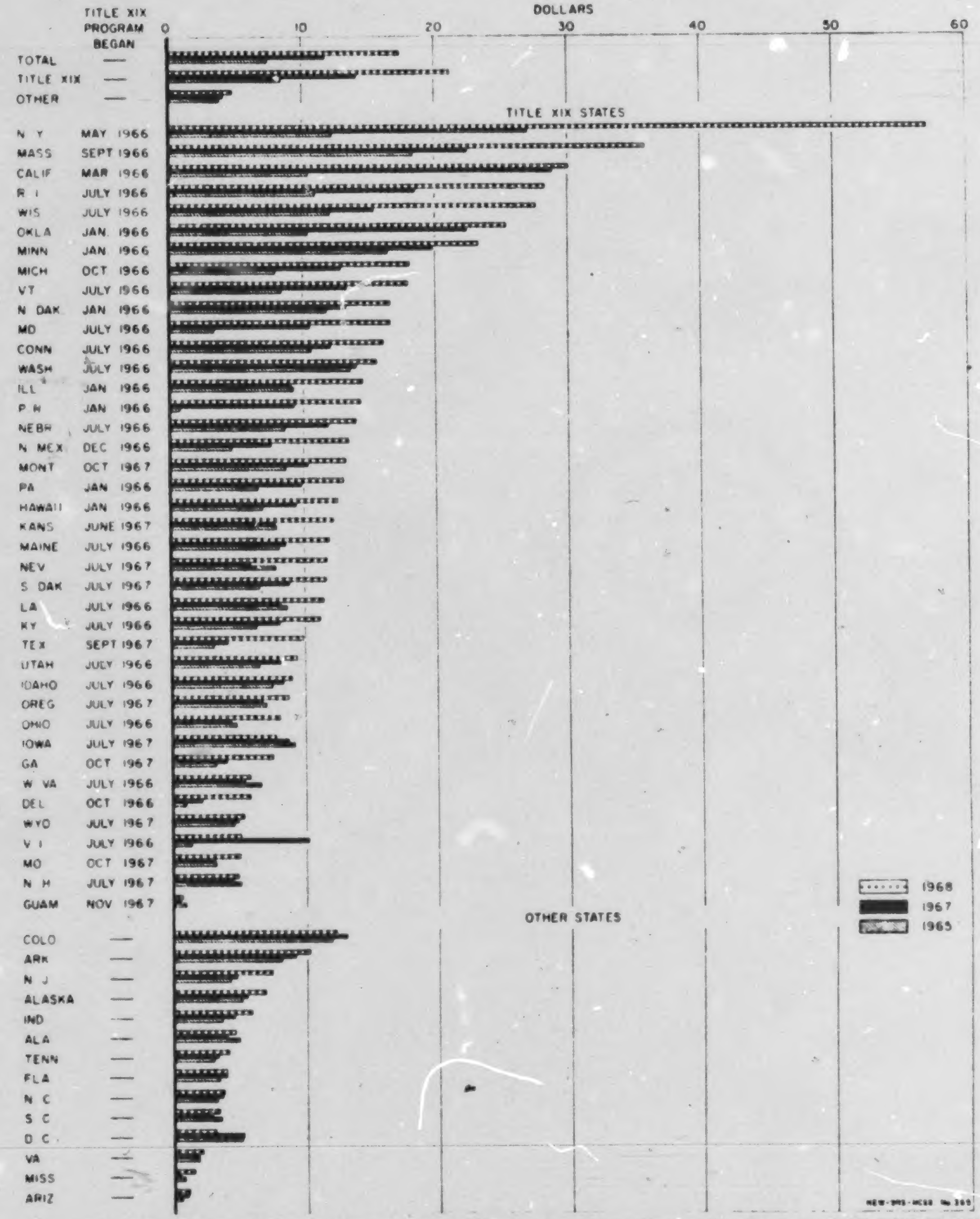
Fiscal year	*Total benefits (in millions)*	*Federal share (in millions)*	*Number of beneficiaries (estimated) unduplicated count)*
1971	$5,895	$3,222	18,223,000
Estimated 1972	7,043	3,853	20,632,000
Estimated 1973	7,861	4,314	23,537,000

Administrative costs in 1971 were $280,573,000 or 4.5 percent of total program costs.

SOURCE: U.S. Congress. Joint Economic Committee. Studies in Public Welfare. Paper No. 2, "Handbook of Public Income Transfer Programs," 1972, p. 201.

The charts that follow (pages 9-15) illustrate Medicaid expenditures by State in a variety of ways:

EXPENDITURES PER INHABITANT FOR MEDICAL ASSISTANCE, 1/
FISCAL YEARS 1968 2/ AND 1967, AND CALENDAR YEAR 1965



1/ INCLUDES EXPENDITURES FOR PAYMENTS MADE DIRECTLY TO MEDICAL VENDORS AND FOR MONTHLY PREMIUMS OR PER CAPITA PAYMENTS INTO AGENCY POOLED FUNDS, TO THE SOCIAL SECURITY ADMINISTRATION (FOR AGED PERSONS), OR TO HEALTH INSURING AGENCIES. INCLUDES ALL SUCH EXPENDITURES MADE UNDER FEDERALLY-AIDED ASSISTANCE PROGRAMS AND UNDER GENERAL ASSISTANCE PROGRAMS FINANCED FROM STATE-LOCAL FUNDS 2/ PRELIMINARY, SUBJECT TO REVISION

SOURCE: U.S. Department of Health, Education and Welfare. Medicaid and Other Medical Care Financed from Public Assistance Funds, Selected Statistics, 1951-1969, p. 35.

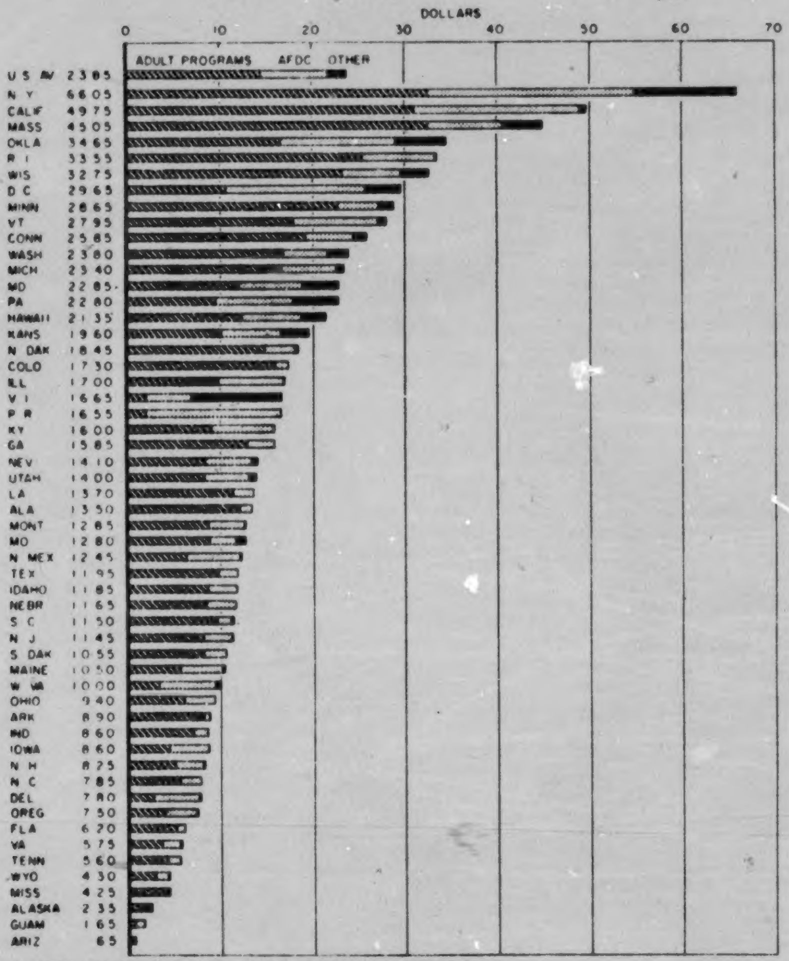
Medical assistance, calendar year 1968

State	Amount 1/ (000)	Cumulative percent of total	Expenditures per inhabitant	Rank of State with respect to expenditures	
				Total	Per inhabitant
	(1)	(2)	(3)	(4)	(5)
Total	$4,096,133	---	$20.20	---	---
New York	1,158,586	28.3	63.95	1	1
California	670,440	44.7	34.85	2	3
Massachusetts	229,242	50.2	42.15	3	2
Michigan	192,541	54.9	22.00	4	9
Illinois	190,662	59.6	17.35	5	12
Pennsylvania	188,880	64.2	16.10	6	18
Wisconsin	133,518	67.5	31.70	7	4
Texas	132,253	70.7	12.05	8	28
Ohio	105,499	73.2	9.95	9	33
Minnesota	94,283	75.6	25.85	10	7
Oklahoma	76,031	77.4	30.20	11	5
Maryland	63,645	79.0	16.95	12	14
Connecticut	60,487	80.5	20.45	13	10
Washington	58,650	81.9	17.90	14	11
New Jersey	52,657	83.2	7.45	15	39
Louisiana	46,865	84.3	12.55	16	27
Georgia	46,445	85.5	10.10	17	32
Puerto Rico	46,030	86.6	16.95	18	13
Kentucky	42,673	87.6	13.20	19	26
Missouri	42,593	88.7	9.20	20	37
Kansas	35,665	89.5	15.50	21	19
Indiana	33,838	90.4	6.70	22	41
Colorado	30,886	91.1	15.10	23	21
Iowa	28,715	91.8	10.45	24	31
Rhode Island	27,520	92.5	30.15	25	6
Florida	25,404	93.1	4.10	26	48
Nebraska	23,355	93.7	16.25	27	16
Arkansas	21,506	94.2	10.70	28	30
North Carolina	20,284	94.7	3.95	29	50
Oregon	19,600	95.2	9.75	30	34
Alabama	18,988	95.6	5.30	31	45
Tennessee	17,580	96.1	4.40	32	47
New Mexico	16,490	96.5	16.25	33	17
West Virginia	13,734	96.8	7.60	34	38
South Carolina	12,460	97.1	4.65	35	46
Virginia	11,282	97.4	2.45	36	51
Maine	11,038	97.7	11.30	37	29
Hawaii	10,613	97.9	13.65	38	25
Montana	10,545	98.2	15.20	39	20
North Dakota	10,312	98.4	16.50	40	15
Utah	9,743	98.7	9.40	41	36
Vermont	9,448	98.9	22.40	42	8
South Dakota	9,148	99.1	13.90	43	24
Idaho	6,780	99.2	9.60	44	35
Nevada	6,675	99.4	14.75	45	22
New Hampshire	4,488	99.6	6.40	46	43
Mississippi	4,318	99.7	1.85	47	53
Delaware	3,542	99.8	6.65	48	42
District of Columbia	3,304	99.8	4.10	49	49
Arizona	2,062	99.9	1.25	50	54
Alaska	1,971	99.9	7.10	51	40
Wyoming	1,814	100.0	5.75	52	44
Virgin Islands	881	100.0	14.15	53	23
Guam	162	100.0	2.00	54	52

1/ Includes expenditures for payments made directly to medical vendors and for monthly premiums or per capita payments into agency pooled funds, to the Social Security Administration (for aged persons), or to health insuring agencies. Includes all such expenditures made under federally-aided assistance programs and under general assistance programs financed from State-local funds.

SOURCE: U.S. Department of Health, Eduation and Welfare. Medicaid and Other Medical Care Financed from Public Assistance Funds, Selected Statistics, 1951-1969, p. 59.

AMOUNT EXPENDED PER INHABITANT 1/ FOR MEDICAL ASSISTANCE, 2/
BY BASIS OF ELIGIBILITY, 3/ FISCAL YEAR 1970



1/ BUREAU OF THE CENSUS, 1970 CENSUS OF POPULATION REPORT, PC(V1)-1
2/ EXCLUDES GENERAL ASSISTANCE
3/ DISTRIBUTION BY BASIS OF ELIGIBILITY ESTIMATED

SOURCE: U.S. Congress. Joint Economic Committee. Studies in Public Welfare. Paper No. 2, "Handbook of Public Income Transfer Programs," 1972, p. 213.

11-214 HI-2277-RR

-EXPENDITURES FOR ASSISTANCE TO RECIPIENTS, BY SOURCE OF FUNDS, FISCAL YEAR 1970

[Dollar amounts in thousands]

State	Total assistance including vendor payments for medical care	Vendor payments for medical care		Total including vendor payments for medicalcare					
				Federal funds		State funds		Local funds	
		Amount	Percent of total	Amount	Percent	Amount	Percent	Amount	Percent
Total	$12,112,866	$4,915,474	40.6	$6,600,341	54.5	$4,396,103	36.3	$1,116,422	9.2
Alabama	170,230	46,636	27.3	132,603	77.9	37,602	22.1	25	(1)
Alaska	7,947	714	9.0	3,712	46.7	4,235	53.3		
Arizona	37,772	1,181	3.1	28,707	76.0	9,065	24.0		
Arkansas	89,104	17,084	19.2	69,602	78.1	19,502	21.9		
California	2,381,852	992,476	41.7	1,169,322	49.1	929,851	39.0	282,680	11.9
Colorado	119,863	38,212	31.9	70,531	58.8	40,763	34.0	8,568	7.1
Connecticut	164,825	78,326	47.5	77,494	47.0	87,331	53.0		
Delaware	16,342	4,285	26.2	9,685	59.3	6,658	40.7		
District of Columbia	57,184	22,447	39.3	29,219	51.1	27,964	48.9		
Florida	159,298	42,102	26.4	117,789	73.9	41,510	26.1		
Georgia	222,465	72,786	32.7	167,447	75.3	49,070	22.1	5,948	2.7
Guam	1,084	142	13.1	542	50.0	542	50.0		
Hawaii	38,108	16,449	43.2	17,936	47.1	20,172	52.9		
Idaho	23,188	8,439	36.4	15,922	68.7	7,266	31.3		
Illinois	547,050	188,797	34.5	262,978	48.1	284,072	51.9		
Indiana	99,381	44,786	45.1	52,727	53.1	34,394	34.6	12,260	12.3
Iowa	101,295	24,341	24.0	55,986	55.3	35,109	34.7	10,200	10.1
Kansas	105,414	44,064	41.8	59,309	56.3	24,146	22.9	21,959	20.8
Kentucky	154,879	51,533	33.3	117,312	75.7	37,567	24.3		
Louisiana	214,217	49,849	23.3	163,222	76.2	50,995	23.8		
Maine	48,657	10,448	21.5	33,836	69.5	12,739	26.2	2,082	4.3
Maryland	182,580	89,659	49.1	90,073	49.3	84,839	46.5	7,668	4.2
Massachusetts	538,248	256,254	47.6	260,070	48.3	278,129	51.7	49	(1)
Michigan	253,143	207,854	45.9	226,256	49.9	226,888	50.1		
Minnesota	201,488	109,068	54.1	114,731	56.9	44,749	22.2	42,008	20.8
Mississippi	81,020	9,394	11.6	66,443	82.0	14,577	18.0		
Missouri	213,405	59,845	28.0	138,624	65.0	74,781	35.0		
Montana	21,347	8,915	41.8	13,836	64.8	4,778	22.4	2,733	12.8
Nebraska	52,427	17,305	33.0	31,670	60.4	14,718	28.1	6,039	11.5
Nevada	14,653	6,896	47.1	8,629	58.9	4,132	28.2	1,892	12.9
New Hampshire	18,692	6,074	32.5	10,982	58.7	5,241	28.0	2,470	13.2
New Jersey	322,114	82,085	25.5	136,052	42.2	146,057	45.3	40,005	12.4
New Mexico	48,584	12,626	26.0	36,200	74.5	12,383	25.5		
New York	2,284,466	1,201,186	52.6	1,038,365	45.5	678,967	29.7	567,133	24.8
North Carolina	143,054	39,950	27.9	104,790	73.3	20,667	14.4	17,598	12.3
North Dakota	23,758	11,396	48.0	16,710	70.3	6,052	25.5	995	4.2
Ohio	315,403	100,244	31.8	181,347	57.5	127,420	40.4	6,636	2.1
Oklahoma	218,284	88,723	40.6	153,827	70.5	64,457	29.5		
Oregon	82,644	15,660	18.9	46,514	56.3	36,130	43.7		
Pennsylvania	654,255	268,624	41.1	326,792	49.9	310,926	47.5	16,537	2.5
Puerto Rico	75,622	44,514	58.9	[2] 33,674	44.5	41,948	55.5		
Rhode Island	64,859	31,885	49.2	33,075	51.0	31,785	49.0		
South Carolina	61,156	29,726	48.6	47,981	78.5	13,174	21.5		
South Dakota	24,127	7,041	29.1	16,394	68.0	7,724	32.0	8	(1)
Tennessee	128,653	22,032	17.1	97,971	76.2	24,960	19.4	5,723	4.4
Texas	477,598	134,067	28.1	339,749	71.1	137,849	28.9		
Utah	41,341	14,806	35.8	27,968	67.7	13,373	32.3		
Vermont	28,891	12,441	43.1	18,739	64.9	10,152	35.1		
Virgin Islands	1,885	1,053	55.8	[2] 738	39.1	1,147	60.9		
Virginia	93,150	26,656	28.6	59,876	64.3	23,989	25.8	9,284	10.0
Washington	196,475	81,115	41.3	94,340	48.0	102,135	52.0		
West Virginia	65,297	17,406	26.7	48,768	74.7	16,528	25.3		
Wisconsin	217,300	144,643	66.6	119,072	54.8	53,336	24.5	44,892	20.7
Wyoming	6,789	1,433	21.1	4,202	61.9	1,558	23.0	1,029	15.2

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[1] Less than 0.05 percent.

[2] Amount less than that obtained by applying formula for computing Federal funds because of the statutory limitation on the aggregate amount of Federal funds that can be made available for a fiscal year.

SOURCE: U.S. Congress. Senate. Material Related to H.R. 1. Aid to the Aged, Blind, and Disabled: Social Services; Fiscal Relief for States, 1971, pp. 43-45.

Note in the following chart the average cost per inhabitant (total) for New York ($80.65), California ($51.65), Massachusetts ($53.60), Washington, D.C. ($49.60), compared to states such as Wyoming ($5.05), Tennessee ($8.95), and Arkansas ($6.40). Also, note the generally small amount spent for "other." New York, again, spent the largest amount for the latter group.

Amount expended per inhabitant 1/ for medical assistance, 2/ by basis of eligibility, 3/ fiscal year 1971

State	Total	Adult programs	AFDC		Other
			Amount	Percent of total	
U.S. average 4/..	$29.20	$17.45	$9.75	33.4	$2.00
Alabama	25.15	17.55	7.55	30.1	.05
Arkansas	6.40	4.60	1.75	27.5	.05
California	51.65	30.95	20.15	39.0	.55
Colorado	23.40	18.10	5.25	22.4	.05
Connecticut	30.30	21.90	6.90	22.7	1.50
Delaware	11.35	3.80	7.35	64.9	.20
District of Columbia	49.60	15.50	26.50	53.4	7.60
Florida	11.65	8.20	3.45	29.7	---
Georgia	27.25	20.05	7.20	26.4	---
Guam	4.90	(5/)	(5/)	---	(5/)
Hawaii	22.95	10.45	8.30	36.2	4.20
Idaho	14.20	9.30	4.90	34.4	---
Illinois	24.35	14.90	9.30	38.1	.15
Indiana	9.00	6.75	2.25	24.8	---
Iowa	8.55	3.40	5.10	59.6	.05
Kansas	16.80	6.90	6.50	38.8	3.40
Kentucky	20.75	12.75	7.90	38.0	.10
Louisiana	14.55	10.75	3.80	26.0	---
Maine	17.15	9.00	7.70	45.0	.45
Maryland	28.05	14.80	8.75	31.2	4.50
Massachusetts	53.60	38.65	10.50	19.6	4.45
Michigan	29.45	18.60	9.80	33.3	1.05
Minnesota	28.65	19.70	7.10	24.8	1.85
Mississippi	15.85	14.05	1.80	11.4	.02
Missouri	12.65	8.40	3.25	25.7	1.00
Montana	15.15	9.40	5.75	37.8	---
Nebraska	14.75	9.75	5.00	34.0	---
Nevada	14.90	8.55	6.10	41.1	.25
New Hampshire	9.55	5.05	4.25	44.5	.25
New Jersey	22.30	12.80	9.25	41.4	.25
New Mexico	15.65	7.55	7.95	50.9	.15
New York	80.65	43.10	26.35	32.7	11.20
North Carolina	18.25	12.85	5.40	29.5	---
North Dakota	20.90	15.85	4.65	22.3	.40
Ohio	12.05	7.55	4.50	37.4	---
Oklahoma	37.30	21.15	9.45	25.3	6.70
Oregon	9.40	3.85	5.30	56.6	.25
Pennsylvania	29.80	12.85	11.15	37.4	5.80
Puerto Rico	16.75	2.05	11.05	66.0	3.65
Rhode Island	42.65	30.55	11.80	27.7	.30
South Carolina	12.65	10.15	2.35	18.6	.15
South Dakota	13.40	10.20	3.20	23.9	---
Tennessee	8.95	5.70	3.25	36.3	---
Texas	15.55	10.35	5.20	33.3	---
Utah	15.35	8.15	6.25	40.[illegible]	.95
Vermont	31.75	19.75	10.75	33.9	1.25
Virgin Islands	16.30	3.70	5.15	31.6	7.45
Virginia	10.80	5.90	4.35	40.1	.55
Washington	29.80	18.90	7.75	26.0	3.15
West Virginia	11.45	4.30	6.40	56.0	.75
Wisconsin	35.15	24.30	7.70	21.9	3.15
Wyoming	5.05	3.05	2.00	39.2	.02

1/ Based on resident population as of July 1, 1971, excluding armed forces overseas, estimated by the Bureau of the Census.

2/ Excludes general assistance.

3/ Distribution by basis of eligibility estimated.

4/ Alaska and Arizona have no program.

5/ Data not available.

SOURCE: U.S. Department of Health, Education and Welfare. Medicaid and other Medical Care Financed from Public Assistance Funds, Fiscal Year 1971, Table 3.

Range of Benefits among the States, 1972 Estimate

Average medical vendor payment per family	*Number of states*
Less than $100	1
$100–249	7
250–399	5
400–549	16
550–699	5
700–849	9
850–999	6
1,000 and over	3

3. From U.S. Department of Health, Education, and Welfare, Social and Rehabilitation Services, unpublished tabulation prepared in 1971. Includes Guam, Puerto Rico, Virgin Islands, and Hawaii; excludes Alaska and Arizona.

SOURCE: Schultze, Charles, et al., Setting National Priorities. The 1973 Budget, 1972, p. 219.

ESTIMATED

Total, Federal, and State medicaid expenditures, fiscal year 1973, under current law and H.R. 1

[In millions of dollars]

State	Total public expenditures			Federal share			State share		
	Current law	Savings under H.R. 1	Expenditures under H.R. 1	Current law	Savings under H.R. 1	Expenditures under H.R. 1	Current law	Savings under H.R. 1	Expenditures under H.R. 1
United States	8,124	1,731	6,393	4,468	914.0	3,554	3,656	817.0	2,839
Alabama	138	27	111	108	14.0	94	30	13.0	17
Alaska	...	...	...	...	...	...	...	...	...
Arizona[1]	...	...	...	...	...	...	...	...	...
Arkansas	16	3	13	13	2.0	11	3	2.0	2
California	1,511	210	1,301	755	110.0	645	755	100.0	656
Colorado	73	11	62	42	6.0	36	31	5.0	25
Connecticut	138	34	104	69	18.0	51	69	16.0	53
Delaware	8	2	6	4	1.8	3	4	1.0	3
District of Columbia	49	17	32	24	9.0	16	24	8.0	17
Florida	146	30	117	89	16.0	74	57	14.0	43
Georgia	203	23	180	142	12.0	130	61	10.0	49
Hawaii	32	5	27	17	3.0	14	16	2.0	13
Idaho	16	1	15	12	.5	11	5	1.0	4
Illinois	317	83	233	158	45.0	113	158	38.0	120
Indiana	81	20	61	45	11.0	34	37	10.0	27
Iowa	49	13	36	28	7.0	21	20	6.0	14
Kansas	57	16	41	34	8.0	25	23	8.0	16
Kentucky	97	30	68	71	16.0	55	26	14.0	12
Louisiana	81	14	67	59	7.0	52	22	7.0	15
Maine	41	6	35	28	3.0	25	13	3.0	10
Maryland	122	41	81	61	22.0	39	61	19.0	42
Massachusetts	382	131	251	191	70.0	121	191	61.0	130
Michigan	349	60	289	175	32.0	142	175	28.0	146
Minnesota	130	43	87	74	23.0	51	56	20.0	36
Mississippi	57	11	45	47	6.0	41	10	5.0	4
Missouri	81	15	66	49	8.0	41	37	7.0	25
Montana	16	3	13	11	1.0	9	5	1.0	4
Nebraska	24	9	15	14	5.0	9	10	4.0	6
Nevada	8	1	7	4	1.0	3	4	1.0	3
New Hampshire	16	4	12	10	2.0	7	7	2.0	5
New Jersey	244	48	195	122	26.0	96	122	22.0	109
New Mexico	24	5	20	18	2.0	15	7	2.0	4
New York	1,722	411	1,311	861	222.0	639	861	189.0	672
North Carolina	130	39	91	95	21.0	74	35	18.0	17
North Dakota	16	6	11	12	3.0	9	5	3.0	2
Ohio	162	31	131	88	16.0	71	75	15.0	60
Oklahoma	122	17	105	84	9.0	75	38	8.0	30
Oregon	32	5	27	19	3.0	16	14	2.0	12
Pennsylvania	463	121	342	255	65.0	189	208	56.0	152
Puerto Rico	81	38	43	41	10.0	30	41	28.0	13
Rhode Island	57	14	43	28	8.0	21	28	7.0	22
South Carolina	49	8	41	38	4.0	34	11	4.0	7
South Dakota	16	1	15	11	0.4	11	5	0.4	4
Tennessee	49	10	38	37	5.0	31	12	5.0	7
Texas	203	12	191	137	6.0	126	71	6.0	65
Utah	24	6	18	17	3.0	14	7	3.0	4
Vermont	24	4	21	16	2.0	14	9	2.0	7
Virgin Islands	2	...	2	1	...	1	1	...	1
Virginia	97	25	72	62	13.0	49	35	12.0	23
Washington	138	22	116	69	12.0	57	69	11.0	59
West Virginia	24	5	20	19	2.0	16	6	2.0	3
Wisconsin	219	40	180	123	22.0	101	97	18.0	79
Wyoming	2	...	2	1	...	1	1	...	1

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[1] No Medicaid program.

SOURCE: U.S. Congress. Senate. Material Related to H.R. 1, Medicare and Medicaid Amendments, 1971, pp. 60-61.

Because of the federal-state nature of the program, the federal share varies from state to state. In 1971, for example, the federal share ranged from 42.1 to 79 percent; the state contributions ranged from 13.4 percent to 55 percent; no local funds were used in 28 states, and in seven states the contribution was less than 1 percent and in 14 states, the costs ranged from 2.3 to 25.1 percent of the total Medicaid expenditures.*

After taking an overview of the state and federal expenditures for Medicaid, the next question to look at is, for what services was the money spent? The following charts give some idea of how the money was spent by type of service and by the years, 1968-1970: In the second chart on amounts of medical vendor payments under federally aided public assistance programs in 1970, note the amount spent nationally for institutional care compared to out-patient services:

In-hospital services --	$2,046,286,000
Nursing home services--	1,465,103,000
Total --	$3,511,389,000
Out-patient services --	$ 265,420,000

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*U.S. Congress, Joint Economic Committee, Studies in Public Welfare, Paper No. 2, "Handbook of Public Income Transfer Programs," (Washington, D.C.: Government Printing Office, 1972), p. 206.

Estimated amounts of medical vendor payments by type of service, and percentage change from preceding year, U.S. 1968, 1969, and 1970

	1968	1969	1970	Percent change 1968 to 1969	Percent change 1969 to 1970
Total payments.....	$3,950,000,000	$4,383,200,000	$5,151,600,000	11	18
Inpatient hospital services........	1,490,000,000	1,676,400,000	1,975,900,000	13	18
Nursing home services........	1,245,000,000	1,312,400,000	1,460,700,000	5	11
Physicians' services........	425,000,000	519,900,000	645,800,000	22	24
Dental services....	200,000,000	185,300,000	171,400,000	-7	-8
Other practitioners' services........	40,000,000	50,600,000	59,100,000	26	17
Outpatient hospital services........	165,000,000	155,300,000	236,000,000	-6	52
Clinic services....	5,000,000	12,900,000	18,400,000	158	43
Lab X-ray services........	25,000,000	29,600,000	33,000,000	18	11
Home health services........	10,000,000	13,300,000	18,300,000	33	38
Prescribed drugs...	285,000,000	356,900,000	439,500,000	25	23
Other care.........	60,000,000	70,600,000	93,500,000	18	32

SOURCE: U.S. Department of Health, Education and Welfare. Numbers of Recipients and Amounts of Payments under Medicaid and Other Medical Programs Financed from Public Assistance Funds, 1970 p. 5.

Amounts of medical vendor payments under federally aided public assistance programs, by specified type of service and State, calendar year 1970

State	Total	Type of service					Dental care	Prescribed drugs	Other services
		Inpatient hospital services	Outpatient hospital services	Other laboratory and X-ray services	Nursing home services	Physicians' services			
Total 1/	$5,355,296,000	$2,046,286,000	$265,420,000	$14,470,000	$1,465,103,000	$640,705,000	$174,441,000	$425,230,000	$247,911,000
Alabama	56,791,000	9,757,000	1,014,000	505,000	22,855,000	6,647,000	---	12,043,000	1,971,000
Arkansas	5,337,000	3,473,000	19,200	1,400	4,000	1,494,000	424,000	---	97,000
California 1/	1,057,394,000	380,219,000	45,309,000	---	214,212,000	209,848,000	56,011,000	55,126,000	56,725,000
Colorado	50,544,000	10,651,000	1,545,000	700,000	24,347,000	6,625,000	---	6,281,000	383,000
Connecticut	81,363,000	27,124,000	3,074,000	---	42,290,000	1,774,000	1,649,000	4,940,000	2,070,000
Delaware	4,428,000	2,645,000	446,000	29,400	30,700	1,774,000	---	647,000	31,500
District of Columbia	30,624,000	15,570,000	4,337,000	42,000	4,191,000	3,422,000	---	2,029,000	1,003,000
Florida	55,433,000	17,347,000	1,771,000	12,500	24,720,000	4,313,000	---	10,345,000	6,600
Georgia	96,846,000	23,146,000	3,154,000	22,400	37,745,000	19,747,000	---	11,931,000	1,051,000
Guam	273,000	127,000	146,000	---	---	---	---	---	---
Hawaii	20,207,000	5,107,000	1,135,000	494,000	8,320,000	3,441,000	932,000	184,000	258,000
Idaho	8,942,000	2,469,000	201,000	27,600	4,404,000	1,951,000	---	---	54,700
Illinois	195,744,000	114,274,000	3,441,000	848,000	5,332,000	24,074,000	8,112,000	22,221,000	16,949,000
Indiana 1/	70,173,000	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
Iowa	22,420,000	5,743,000	761,000	8,500	1,294,000	5,975,000	2,164,000	5,446,000	1,119,000
Kansas	39,472,000	15,466,000	1,167,000	---	5,044,000	8,505,000	2,621,000	5,974,000	753,000
Kentucky	55,541,000	19,495,000	1,471,000	76,300	9,042,000	10,775,000	1,297,000	11,544,000	831,000
Louisiana	53,207,000	18,551,000	1,016,000	155,000	20,507,000	4,521,000	2,400	8,217,000	269,000
Maine	12,415,000	6,484,000	648,000	---	729,000	2,714,000	---	957,000	196,000
Maryland	95,546,000	53,506,000	8,580,000	---	15,069,000	6,341,000	1,802,000	9,524,000	715,000
Massachusetts	277,014,000	101,579,000	11,696,000	1,133,000	88,031,000	20,020,000	17,541,000	25,290,000	11,906,000
Michigan	228,770,000	73,173,000	5,650,000	3,787,000	102,473,000	25,155,000	---	15,331,000	2,964,000
Minnesota	109,581,000	24,176,000	2,144,000	472,000	50,721,000	9,722,000	3,132,000	10,754,000	4,513,000
Mississippi	17,470,000	4,707,000	227,000	11,000	5,620,000	3,705,000	190,000	3,121,000	157,000
Missouri	55,744,000	18,147,000	2,347,000	26,400	15,511,000	11,028,000	1,977,000	9,673,000	26,400
Montana	8,927,000	2,130,000	143,000	70,100	3,149,000	1,650,000	693,000	945,000	372,000
Nebraska	19,770,000	6,752,000	406,000	444,000	4,714,000	2,546,000	959,000	3,204,000	737,000
Nevada	7,111,000	2,354,000	283,000	80,400	2,407,000	1,116,000	70,600	611,000	180,000
New Hampshire	5,746,000	2,451,000	97,200	---	219,000	1,247,000	402,000	1,795,000	248,000
New Jersey	124,371,000	41,804,000	6,320,000	206,000	41,962,000	13,750,000	6,435,000	9,977,000	3,613,000
New Mexico	13,551,000	4,184,000	316,000	462,000	1,544,000	2,543,000	584,000	2,248,000	882,000
New York	1,254,031,000	606,491,000	90,167,000	---	318,545,000	80,352,000	42,464,000	50,470,000	69,717,000
North Carolina	67,251,000	36,215,000	2,443,000	---	10,440,000	9,275,000	4,609,000	11,231,000	2,909,000
North Dakota	11,119,000	2,043,000	61,400	166,000	4,300,000	443,000	344,000	1,774,000	471,000
Ohio	115,429,000	47,197,000	5,487,000	53,700	26,647,000	6,424,000	4,662,000	16,098,000	8,443,000
Oklahoma	85,165,000	21,559,000	439,000	759,000	46,470,000	12,222,000	372,000	132,000	3,139,000
Oregon	19,035,000	8,720,000	610,000	746,000	2,224,000	3,744,000	402,000	2,065,000	621,000
Pennsylvania	310,421,000	143,472,000	8,701,000	472,000	114,914,000	19,744,000	4,601,000	20,213,000	637,000
Puerto Rico	44,354,000	13,344,000	30,469,000	---	---	---	---	---	---
Rhode Island	35,467,000	20,644,000	1,508,000	72,700	5,273,000	2,929,000	833,000	4,023,000	671,000
South Carolina	28,127,000	7,813,000	477,000	300	12,022,000	4,058,000	50,500	3,553,000	303,000
South Dakota	7,168,000	1,641,000	120,000	---	4,543,000	1,101,000	600	---	245,000
Tennessee	23,541,000	9,025,000	1,646,000	2,700	734,000	3,644,000	470	8,237,000	74,000
Texas	131,643,000	38,440,000	3,274,000	1,907,000	34,475,000	34,232,000	---	---	13,707,000
Utah	16,347,000	5,616,000	1,102,000	---	4,166,000	2,071,000	1,254,000	1,310,000	623,000
Vermont	12,543,000	5,644,000	291,000	---	3,067,000	2,213,000	---	1,295,000	89,200
Virgin Islands 1/	1,009,000	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
Virginia	37,251,000	16,217,000	2,780,000	32,800	6,227,000	6,009,000	---	4,932,000	1,053,000
Washington	97,373,000	79,471,000	1,774,000	474,000	33,025,000	12,124,000	3,720,000	6,944,000	984,000
West Virginia	16,315,000	7,144,000	174,000	---	91,400	4,621,000	543,000	2,595,000	796,000
Wisconsin	151,225,000	22,272,000	3,034,000	37,800	62,447,000	14,784,000	3,591,000	10,008,000	29,042,000
Wyoming	1,565,000	550,000	45,400	4,200	549,000	447,000	---	---	100

1/ Total includes $75,506,000 for which type of service was not reported, as follows: California $4,324,000, Indiana $70,173,000, and the Virgin Islands $1,009,000.
2/ Data not reported.

SOURCE: U.S. Department of Health, Education and Welfare. Public Assistance Statistics, July 1971, p. 5.

Percentage distribution of medical vendor payments under federally aided public assistance programs, by specified type of service and State, calendar year 1970

State	Total	Type of service							
		Inpatient hospital services	Outpatient hospital services	Other laboratory/ and X-ray services	Nursing home services	Physicians' services	Dental care	Prescribed drugs	Other services
Total............	100.0	38.9	5.0	0.3	27.7	12.1	3.3	8.0	4.7
Alabama............	100.0	17.8	1.9	.9	41.7	12.1	---	22.0	3.6
Arkansas............	100.0	63.1	.3	(1/)	.1	27.9	7.9	---	.7
California............	100.0	36.1	4.3	---	20.8	19.0	5.3	9.1	5.4
Colorado............	100.0	21.1	3.1	1.4	48.1	13.1	---	12.4	.8
Connecticut............	100.0	27.0	3.8	---	51.6	7.4	1.8	5.9	2.5
Delaware............	100.0	50.0	9.1	.6	.6	26.0	---	13.1	.6
District of Columbia..	100.0	50.9	14.2	.3	13.7	11.0	---	6.6	3.3
Florida............	100.0	29.7	3.0	(1/)	42.1	7.4	---	17.7	(1/)
Georgia............	100.0	24.1	3.3	(1/)	38.9	20.4	---	12.2	1.1
Guam............	100.0	46.5	53.5	---	---	---	---	---	---
Hawaii............	100.0	25.3	6.6	2.4	41.2	17.3	4.9	.9	1.4
Idaho............	100.0	27.3	2.3	.3	48.9	20.6	---	---	.6
Illinois............	100.0	58.4	2.0	.5	2.7	12.3	4.1	11.4	8.6
Indiana............	---	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
Iowa............	100.0	25.7	3.3	(1/)	5.4	26.7	9.7	24.3	5.0
Kansas............	100.0	39.4	2.9	---	12.9	21.4	6.6	15.0	1.9
Kentucky............	100.0	35.9	2.7	.1	16.4	19.5	2.3	21.5	1.6
Louisiana............	100.0	34.9	1.9	.3	38.5	8.5	(1/)	15.4	.5
Maine............	100.0	56.2	5.2	---	5.9	23.5	---	7.7	1.5
Maryland............	100.0	56.0	9.0	---	15.8	6.6	1.9	10.0	.7
Massachusetts............	100.0	36.7	4.2	.4	31.8	7.2	6.3	9.1	4.3
Michigan............	100.0	32.0	2.5	1.7	44.8	11.0	---	6.7	1.3
Minnesota............	100.0	22.0	2.0	.4	46.2	8.9	2.9	9.8	7.8
Mississippi............	100.0	26.6	1.3	.1	31.7	21.0	.7	17.7	.9
Missouri............	100.0	30.9	4.0	(1/)	26.4	18.8	3.4	16.5	(1/)
Montana............	100.0	23.9	1.7	.8	35.8	18.6	5.5	9.5	4.2
Nebraska............	100.0	34.2	2.1	2.2	23.9	12.9	4.9	16.2	3.7
Nevada............	100.0	33.1	4.0	1.1	33.9	15.7	1.0	8.6	2.7
New Hampshire............	100.0	40.9	1.6	---	3.6	20.8	6.7	21.4	5.0
New Jersey............	100.0	33.7	5.1	.2	[illegible]	[illegible]	5.2	8.0	2.9
New Mexico............	100.0	36.4	2.3	3.4	11.4	18.8	4.3	17.0	6.5
New York............	100.0	48.0	7.2	---	25.4	6.4	3.4	4.0	5.6
North Carolina............	100.0	39.0	3.6	---	15.7	13.7	6.9	16.7	4.4
North Dakota............	100.0	26.2	.6	1.5	43.2	8.7	3.1	12.4	4.2
Ohio............	100.0	39.3	5.0	.1	24.2	5.4	4.1	14.3	7.1
Oklahoma............	100.0	25.3	.5	.9	54.7	14.4	.4	.2	3.7
Oregon............	100.0	45.9	3.6	3.9	12.1	17.3	3.2	10.9	3.3
Pennsylvania............	100.0	45.2	2.7	.1	37.7	6.2	1.4	6.4	.2
Puerto Rico............	100.0	30.1	69.9	---	---	---	---	---	---
Rhode Island............	100.0	57.4	4.2	.2	14.7	8.1	2.3	11.2	[illegible]
South Carolina............	100.0	27.6	1.8	(1/)	42.4	14.3	.2	12.6	[illegible]
South Dakota............	100.0	24.5	1.5	---	57.0	13.8	(1/)	---	[illegible]
Tennessee............	100.0	39.0	6.9	(1/)	3.1	15.3	(1/)	34.5	[illegible]
Texas............	100.0	29.2	2.5	1.5	30.4	26.0	---	---	10.4
Utah............	100.0	34.4	6.7	---	25.5	12.7	7.7	8.0	5.1
Vermont............	100.0	44.9	2.2	---	24.4	17.6	---	10.3	.7
Virgin Islands............	---	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
Virginia............	100.0	43.5	7.5	.1	16.7	16.1	---	13.2	2.8
Washington............	100.0	32.6	2.3	.5	37.8	13.9	4.3	7.5	1.1
West Virginia............	100.0	44.9	1.1	---	.6	28.9	3.4	16.2	5.0
Wisconsin............	100.0	18.7	2.0	(1/)	41.3	9.8	2.4	6.6	19.2
Wyoming............	100.0	34.5	2.9	.3	34.4	28.0	---	---	(1/)

1/ Less than 0.05 percent.
2/ Data not reported.

SOURCE: U.S. Department of Health, Education and Welfare. Public Assistance Statistics, July 1971, p. 6.

In 1972, 40 percent of Medicaid funds went towards hospital care, and 30 percent towards nursing home care.[*] In 1970, 66.5 percent of medical assistance payments were spent for hospital and nursing home care, 13 percent for physicians' services and 9 percent for other services[**]--thus resulting in an increase in the total percentage spent on in-patient care. In FY 1969, 37.5 percent was spent for in-patient hospital care, and nursing home care amounted to 29.8 percent, totaling 67.3 percent.[***]

Increased Costs, Why?

In briefly discussing the possible reasons for the continuing Medicaid expenditures, one should remember that while the costs were increasing throughout the program, the numbers of potential eligibles for the program decreased, as well as the number of over-all services provided by the program.

As is well known, an increase in costs often reflects an increased demand for the services or goods. With the availability of additional funds for medical care, the demand increased, driving up overall medical costs. Medical care prices, particularly hospital costs, have risen faster than any other consumer goods. For example, the consumer price index increased 19.7 percent for all consumer goods during 1966-70, while physicians' fees were increasing by 30 percent and hospital daily service charges by 71.3 percent.[****]

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[*] Charles Schultze et al., Setting National Priorities. The 1973 Budget, p. 218.

[**] U.S., Congress, Joint Economic Committee, Studies in Public Welfare, Paper No. 2, p. 208.

[***] Rosemary Stevens and Robert Stevens, "Medicaid: An Anatomy of a Dilemma," Law and Contemporary Problems 35 (Spring 1970): p. 381.

[****] Howard Newmann, "Medicare and Medicaid," p. 121.

Physicians' fees over the first three years of the program, from June 1966 to June 1969, increased 22 percent and hospital daily service charges rose 55 percent.[*] The Medicaid program has tended to provide better coverage for in-hospital service vs. other types of health care, so that this alone is a large factor in the soaring costs. Also, hospital costs vary greatly from state to state. In the states that have utilized much of the federal Medicaid money (California, Massachusetts and New York), the average hospital prices in 1970 exceeded $100 per day.[**]

The method for reimbursement to vendors was on a "reasonable cost"[***] basis rather than on a state-wide fee basis. Although the regulations appear to have been lenient in providing certain services, there was a lack of what is known as "front-end funding."[****] This type of funding would have provided monies for program development and redistribution of funds other than for direct financing of services into the already established modes of delivering service. This lack aided in the inflation of medical care prices. As it appeared over and over again in the literature, those who benefited from the program were more often than not the deliverers of services.[*****]

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[*] Rita Campbell, Economics of Health and Public Policy, (Washington, D.C.: American Enterprise Institute, 1971), p. 35.

[**] Charles Schultze et al., Setting National Priorities. The 1973 Budget, p. 226.

[***] Rosemary Stevens and Robert Stevens, "Medicaid: An Anatomy of a Dilemma," p. 381.

[****] Howard Newman, "Medicare and Medicaid," p. 120.

[*****] Rosemary Stevens and Robert Stevens, "Medicaid: An Anatomy of a Dilemma," p. 350.

In addition, there were few incentives to control costs or to reduce unnecessary utilization of services. Problems existed in the administration, operation and supervision of the program.*

The Medicaid Recipients

The numbers of "medically indigent" receiving Medicaid were minute compared to those receiving public assistance. As of May, 1971, for example, 78 percent of all Medicaid beneficiaries were also recipients of public assistance, accounting for 57 percent of the Medicaid costs.** In FY 1972, of those utilizing the program, 82 percent were public assistance recipients.***

Within the "medically indigent" category, income was treated differently. In New York State, for example, a family's income may have been exactly the same, but, if the family is deemed "non-categorically related," vs. "categorically-related," his income was treated differently.****

As of July 1971, almost half the states restricted payments to only those receiving public assistance. At the same time, some states expanded their Medicaid programs to the "medically needy" as the following chart indicates:

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*Howard Newman, "Medicare and Medicaid," p. 124.

**U.S., Congress, Joint Economic Committee, Studies in Public Welfare, Paper No. 8, p. 8.

***U.S., Congress, Joint Economic Committee, Studies in Public Welfare, Paper No. 1, "Public Income Transfer Programs: The Incidence of Multiple Benefits and the Issues Raised by their Receipt," by James Storey, (Washington, D.C.: Government Printing Office, 1972), p.32.

****U.S., Congress, Joint Economic Committee, Studies in Public Welfare, Paper No. 8, p. 68-69.

Federal medical assistance percentage[1] *for medicaid financing and treatment of medically indigent by State*

States excluding medically indigent:[2]	*Percent*	States including medically indigent:[3]	*Percent*
Alabama	78	California	50
Arkansas	79	Connecticut	50
Colorado	58	District of Columbia	50
Delaware	50	Guam	50
Florida	61	Hawaii	51
Georgia	70	Illinois	50
Idaho	72	Kansas	59
Indiana	55	Kentucky	73
Iowa	58	Maryland	50
Louisiana	73	Massachusetts	50
Maine	69	Michigan	50
Mississippi	83	Minnesota	57
Missouri	60	Nebraska	58
Montana	67	New Hampshire	59
Nevada	50	New York	50
New Jersey	50	North Carolina	73
New Mexico	73	North Dakota	71
Ohio	54	Oklahoma	69
Oregon	57	Pennsylvania	55
South Carolina	78	Puerto Rico	50
South Dakota	70	Rhode Island	50
Tennessee	74	Utah	70
Texas	65	Vermont	65
West Virginia	77	Virgin Islands	50
Wyoming	63	Virginia	64
		Washington	50
		Wisconsin	56

[1] Federal medical assistance percentage: Rate of Federal financial participation in a State's medical vendor payment expenditures on behalf of individuals and families eligible under title XIX of the Social Security Act.

[2] These States offer basic required medicaid services for people receiving federally supported financial assistance.

[3] These States also offer medicaid services for people in public assistance categories who are financially eligible for medical but not for financial assistance.

Source: U.S. Department of Health, Education, and Welfare, Social and Rehabilitation Service, Public Information Office, 1971.

SOURCE: U.S. Congress. Joint Economic Committee. Studies in Public Welfare. Paper No. 7, "Issues in the Coordination of Public Welfare Programs," 1973, p. 89.

Needless to say there were many poor families with medical bills who were not covered even by the original Medicaid legislation. The South, for example, had 10 1/4 million people living at the federally-defined notion of poverty; and this figure accounts for 20 percent of the total southern population.* Note in the above table that of the states excluding the "medically indigent," 11 are Southern or border states. And in the following table, note that 47 percent of the poor live in the South; yet they received only 16.7 percent of the Medicaid funds in the year 1970.

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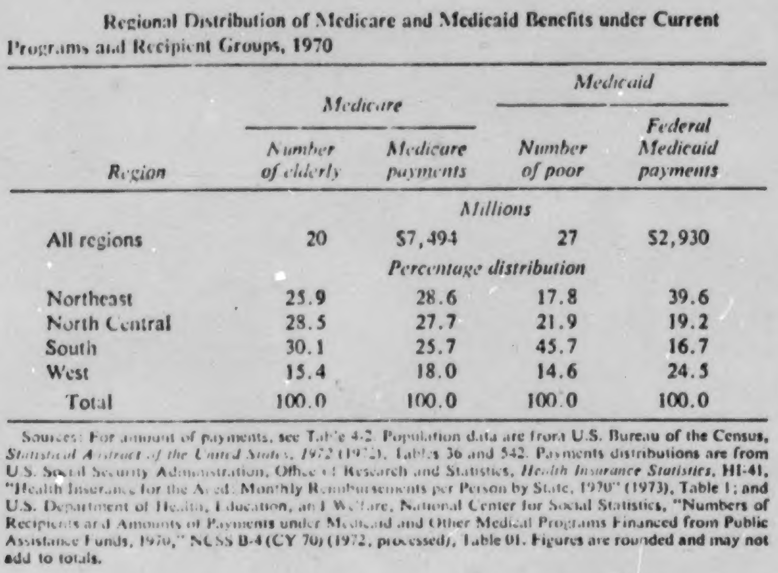
*Robert Anderson and Susan Morgan, Comprehensive Health Care: A Southern View (Atlanta, Georgia: Southern Regional Council, 1973), p. 3.



Regional Distribution of Medicare and Medicaid Benefits under Current Programs and Recipient Groups, 1970

Region	*Medicare*		*Medicaid*	
	Number of elderly	*Medicare payments*	*Number of poor*	*Federal Medicaid payments*
		Millions		
All regions	20	$7,494	27	$2,930
		Percentage distribution		
Northeast	25.9	28.6	17.8	39.6
North Central	28.5	27.7	21.9	19.2
South	30.1	25.7	45.7	16.7
West	15.4	18.0	14.6	24.5
Total	100.0	100.0	100.0	100.0

Sources: For amount of payments, see Table 4-2. Population data are from U.S. Bureau of the Census, *Statistical Abstract of the United States, 1972* (1972), Tables 36 and 542. Payments distributions are from U.S. Social Security Administration, Office of Research and Statistics, *Health Insurance Statistics*, HI-41, "Health Insurance for the Aged: Monthly Reimbursements per Person by State, 1970" (1973), Table 1; and U.S. Department of Health, Education, and Welfare, National Center for Social Statistics, "Numbers of Recipients and Amounts of Payments under Medicaid and Other Medical Programs Financed from Public Assistance Funds, 1970," NCSS B-4 (CY 70) (1972, processed), Table 01. Figures are rounded and may not add to totals.

SOURCE: Schultze, Charles. Setting National Priorities. The 1974 Budget, 1973, p. 114.

Considering the minute relief given to many poor people under the Medicaid program, only a small percentage (13%) of relief is furnished families under $5,000 income through income tax subsidies.

Table 4-2. Distribution of Federal Medical Care Benefits under Medicare, Medicaid, and Income Tax Subsidies, by Family Income and Age, 1970

Family income class	*Total federal benefits*	*Program* *Medicare payments*	 *Medicaid payments*	 *Federal individual income tax subsidies*	*Age* *Under 65*	 *65 and over*
			Millions of dollars			
All classes	14,224	7,494	2,930	3,800	4,994	9,230
			Percentage distribution			
Under $5,000	46	54	67	13	29	55
$5,000–$9,999	27	26	24	31	26	27
$10,000–$14,999	16	14	5	26	23	12
$15,000 and over	12	7	4	30	22	7
Total	100	100	100	100	100	100

Sources: Total Medicare and Medicaid payments are from U.S. Social Security Administration, Office of Research and Statistics, *Compendium of National Health Expenditures Data*, DHEW (SSA) 73-11903 (1973), p. 73; the distribution is derived from unpublished estimates of payments by family income.

The amount of tax subsidy is from Bridger M. Mitchell and Ronald J. Vogel, "Health and Taxes: An Assessment of the Medical Deduction" (1973; processed), pp. 21, 31; the distribution is based on data in ibid., p. 34, and Martin S. Feldstein and Elizabeth Allison, "Tax Subsidies of Private Health Insurance: Distribution, Revenue Loss and Effects," Discussion Paper 237 (Harvard Institute of Economic Research, Harvard University, April 1972; processed), p. 5.

Medicaid payments for persons over sixty-five are distributed as 67 percent to the "under $5,000 class" and 33 percent to the "$5,000–$9,999" class. All Medicare payments are distributed to the group sixty-five and over. Tax subsidies for ages over and under sixty-five are estimated from the Brookings file of 1970 individual income tax returns.

Figures are rounded and may not add to totals.

SOURCE: Schultze, Charles. Setting National Priorities. The 1974 Budget, 1973, p. 112.

The next table shows the estimated number of recipients by the basis of eligibility for 1968, 1969, and 1970 and the percentage change from year to year. The increases reflect a 40 percent rise in the number of public assistance recipients; notice the drop of 26 percent for the "other" category. The latter category reflects persons between the ages of 21-64 who were not blind or disabled; 75 percent of these represent recipients from New York and Puerto Rico.

	1968	1969	1970	Percent change 1968 to 1969	Percent change 1969 to 1970
Total recipients.....	13,000,000	14,875,000	17,340,000	14	17
Age 65 or over.......	2,860,000	3,041,000	3,835,000	6	26
Blindness............	78,000	99,000	122,000	27	23
Permanent and total disability......	882,000	1,055,000	1,552,000	20	47
Dependent children under 21........	5,910,000	6,562,000	7,614,000	11	16
Adults in families with dependent children......	2,410,000	3,156,000	3,503,000	31	11
Other................	860,000	962,000	714,000	12	-26

SOURCE: U.S. Department of Health, Education and Welfare. Numbers of Recipients and Amounts of Payments under Medicaid and Other Medical Programs Financed from Public Assistance Funds, 1970, p. 1.

Taking into consideration, from the last chart, the decrease in the numbers in the "other" category, note in the following chart, among other things, that there was a decrease of only 4 percent in the expenditures for the "other" group in the period from 1969-1970. This chart is estimated data on medical vendor payments by basis of eligibility for 1968, 1969 and 1970.

	1968	1969	1970	Percent change 1968 to 1969	Percent change 1969 to 1970
Total.............	$3,950,000,000	$4,383,200,000	$5,151,600,000	11	18
Age 65 and over...	1,750,000,000	1,801,600,000	1,955,200,000	3	9
Blindness.........	32,000,000	36,500,000	40,200,000	14	10
Permanent and total disability...	667,000,000	826,200,000	1,062,000,000	24	29
Dependent children under 21.....	580,000,000	718,400,000	909,000,000	24	27
Adults in families with dependent children.....	621,000,000	730,100,000	926,500,000	18	27
Other.............	300,000,000	270,400,000	258,700,000	-10	-4

SOURCE: U.S. Department of Health, Education and Welfare. Numbers of Recipients and Amounts of Payments under Medicaid and Other Medical Programs Financed from Public Assistance Funds, 1970, p. 1.

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HEALTH

"The Neighborhood Health Center: Is Limelight Conducive to Growth"

by

John J. Lucas Jr.

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AN IMPRESSIONISTIC SURVEY OF NEIGHBORHOOD HEALTH CENTERS

CHAPTER I. WHO'S RUNNING THE SHOW, WPA OR OEO?

Numerous centers seem to have erred in excess in meeting goals of employing community people in health care roles. Judging from the over-staffing that is endemic at the sub-professional level, many centers are uncertain whether their primary thrust is aimed at unemployment or ill-health. Perhaps administrators and community boards, without understanding diminishing returns and that more is often less, believe the goals compatible. They are not.

> ITEM: At one center, a health team had four family health aides working with two physicians. A physician's request that a patient be brought into an examination room prompted an extended discussion among the aides regarding who had escorted the last patient. After several minutes of overhearing this heated debate, the physician brought in the patient.
>
> ITEM: One project employed one outreach worker per one hundred families. The administrator acknowledged that many of the families didn't need outreach at all; one got the impression that many families utilized the outreach program because refusal to do so would have violated the "rules of the game".
>
> ITEM: The main reception desk at one large and amply funded project was staffed by three people who were occupied with

a crossword puzzle, a comic book, and a letter. An elderly woman stood at the counter shuffling medical forms for several minutes before being noticed by one of the receptionists.

ITEM: Many of the centers have day care facilities for patients' children. At one such facility, staff outnumbered children (during the time I visited) three to one.

Applicant need, rather than capability, was once the predominant criterion in choosing staff at most centers. For many of the non-professional staff, employment at the center was a first job; showing up regularly, remaining sober, and cooperating with co-workers would not be taken for granted, much less civility to patients. Disciplinary efforts, according to one medical director, were met with nonchalance at best and with hostility ("I'm gonna kill you") at worst.

As reality intruded upon high hopes, many centers became disenchanted with their role of employing the virtually unemployable in make-work positions. Community people are still given preference in hiring, but jobs go to the most capable, not th~~e most "~~deserving". High turnover among personnel is not only tolerated but seems to be encouraged at some centers. One project administrator claimed 60% of non-professional staff turned over yearly and that figure "should be higher". Many of the staff, he complained, still resented "...having their social life interrupted by patients."

In-house training programs for non-professional staff are now a rarity. These programs trained many of the family health workers, home health aides, clinic aides, health education aides and so on who were supposed to achieve vertical and horizontal mobility. More often than not, lack of standardized credentials restricted access to health jobs outside of the centers. Non-professionals who lost jobs at the centers because of budget cutbacks were usually unable to find comparable positions elsewhere; whatever lateral mobility occurred was generally due to specific agreements between individual centers and local hospitals.

CHAPTER II. IS THE COMMUNITY BORED WITH HEALTH?

What with the considerable type and oversell that accompanied early OEO proposals for community advisory boards, it was somewhat unsettling to be unable to find one patient who was familiar with that group. One woman (whose daughter was employed at the center) remembered having heard of the board but had no knowledge of how or why it operated. Several administrators did not know how the board was chosen or elected; one alleged: "I've been meaning to find that out".

The idea of a representative community board is something of a logical absurdity. Health care, except in emergencies, is a low priority item on the agenda of poverty populations; any center patient willing to spend as little as an hour a month discussing health care delivery during community board meetings is not representative of the community.

This is not to completely discount the importance of the community board. The board in many centers seemed to serve an an effective buffer zone between the center and the outside world. That is, the board can operate freely in the political arena while letting the health staff attend to strictly health matters. Furthermore, the board is a vital element in the co-optation of potentially hostile elements in the community. For instance, country medical societies were represented on the boards of all the centers I visited.

Many boards, however, were extensions of the personnel office, exerting undue influence on hiring and firing; they have yet to learn that political patronage has no place in staffing a health center. At one project, an addict was repeatedly terminated for coming in late, abusing patients, and stealing supplies. Several times, the board forced the personnel office to re-hire him, claiming "We're here to provide jobs to those who need them most."

The community board is potentially useful in dealing with patients' complaints and suggestions, serving as intermediary between the community and the centers' staff. Yet, with no patient I spoke with having any idea of what the board was, it doesn't seem like this is happening. Or, if it is happening, the grievance procedure flows through patient advocates or the like.

CHAPTER III. OUTREACH AND SOCIAL SERVICES

Program management and leadership are keystones of the centers' overall success. No program feature seemed more vulnerable to poor management and leadership than outreach. At one center, the outreach workers were claiming to visit center registrants (scheduling 8 visits per day and invariably reporting that all 8 people were at home) while actually sitting in their cars. Seeing no incentive for salvaging the program (outreach is not reimbursable under Title 19), the administrator ended it.

A recurrent problem pointed out by administrators and physicians concerned confidentiality. They frequently complained that outreach created another layer of personnel acquainted with a family's health problems and increased chances of sensitive material from the patient record being circulated throughout the community. At one center, a patient overheard neighbors discussing her forthcoming abortion. An outreach worker had apparently discussed the woman's case with her friends.

Use of people from the community as outreach workers may or may not encourage patient acceptance. While one patient may be more comfortable discussing personal problems with peers, another may prefer to deal with someone from outside the community, as breach of confidentiality would be less critical. The number of occasions when confidentiality was cited as a problem leads me to conclude that it is a central drawback to outreach, one that the centers are ill-equipped to handle. (This, in spite of one regional administrator's claim that it has been solved because "all the outreach workers have read a book on confidentiality.")

Physician appraisal of the usefulness of outreach workers was mixed. Some argued that the workers were helpful in supervising compliance with various regimens of therapy; often outreach workers would pinpoint health problems that the physician might have overlooked or identify environmental causes of ill-health. Other physicians believed that outreach staff recruited from poverty populations were inherently incapable of communicating with professionals, that penetrating language barriers was an inefficient use of their time. Physicians with this negative reaction to outreach workers generally preferred to deal with public health nurses who could provide strictly health-related information couched in the jargon of the profession.

That outreach is potentially useful is clear. Home-health aides can serve a multitude of purposes including visiting with and getting medications to the isolated elderly, coordinating services with schools and welfare departments, shopping for those confined to their homes, taking blood pressures, checking for evidence of child abuse, and generally serving as social welfare ombudsmen. At one center I visited, outreach staff drove patients to the hospitals if emergencies occurred while the health center was closed. It is also clear, however, that many centers lack the managerial skills essential to an effective outreach program.

Outreach cannot compete with other health needs for scarce federal dollars. National Health Insurance will not reimburse centers for outreach encounters; the thinking at DHEW is that the centers should not receive supplemental funds to continue these services. Presently, budget cuts are forcing numerous centers to trim their outreach staffs; at centers where diminishing returns have set in this is beneficial (one center I saw had four outreach people per physician). The centers are not required to limit outreach but must bring staffing in line with priorities; it is not remarkable that outreach is considered less important than the direct provision of traditional health services.

CHAPTER IV. FILLING GAPS OR STUFFING CREVICES

A majority of those generally opposed to federal involvement in the direct provision of health services would probably allow that such activity is warranted as a gap-filling mechanism. It is not surprising that the "gap-filling" model arouses little enthusiasm among community health center advocates; this model raises several fundamental equity issues.

Some 160 comprehensive health projects are now receiving federal funds (primarily 314e); these centers, by definition, provide one-stop ambulatory health services as well as supportive services which often include outreach and homemaking. These pastures of relative professional and para-professional plenty stand out strikingly in a national health scene characterized by maldistribution of services, by suburban glut and rural gap. More than 140 counties in the United States, for instance, do not have a single physician.

Providing a small number of shortage areas with comprehensive health centers while other areas remain virtually without health services is, over the long-term, difficult to justify. Equity problems can be resolved by either eliminating all elaborate comprehensive health facilities (considered too expansive for a gap-filling model) or expanding the number of community health centers to include all underserved areas.

The latter option demands, in the spirit of equity, that the community health center (CHC) become a floor under health care, the bare acceptable minimum. Any area without a CHC or its equivalent would become a target for federal dollars. This approach would cost roughly half the national budget.

The equity shortcomings of a limited number of neighborhood health centers were anticipated by OEO planners. Inequity was to trigger discontent with fragmented, discontinuous curative health care throughout the nation. Public pressure would, they believed, inflate the number of CHC's to 1,000, a figure tossed out as sufficient to remedy equity problems.

(My best guess is that 1,000 is far short of the required number, because hardly anyone of any income stratum has easy access to the optional array of services of the CHC.) No one anticipated that each of the 1,000 centers would be free-standing ambulatory clinics; the majority were to be improved outpatient departments, group practices, and the like. Public outrage rather than federal dollars was to bring the number of comprehensive projects up to 1,000.

The short-term answer to questions of equity is most curious. It is (as stated by the Office of Management and Budget): "no starts, no expansions". Apparently preferring to reify rather than resolve equity problems, OMB probably reflects accurately the prevailing winds in health politics. The 160 centers cannot, they recognize, be discontinued; political pressures for their survival are enormous. Yet, little pressure exists for new centers.

This seems to suggest that the 160 "demonstrations" in ambulatory health care have demonstrated a basic tension between what health care consumers actually want, what administrators, planners and health radicals think they ought to want, and what they (health consumers) need. No outpouring of well-founded discontent has occurred; one measure of this fact is the lack of state and local involvement in improved ambulatory health services.

It would appear, then, that the demands of consumers can be brought into line with what planners think they ought to want but only after the fact. That is, public support for health centers is likely to derive from their actual utilization, not from informed discontent with prevailing, non-comprehensive services.

CHAPTER V. PATIENT ACCEPTANCE

The most striking impression of visits to the centers was the extraordinary degree of patient satisfaction. Informal talks with three patients at each center revealed patient populations highly pleased with the health care they had been receiving at the various centers.

Also surprising was the tendency of patients to describe specific negative features (usually waiting time) but to give the program as a whole a genuinely enthusiastic endorsement. One patient, for example was told she had gonorrhea; the diagnosis, it was later determined, belonged to another woman with the same last name. After a graphic recounting of her husband's alarmed reaction, this patient launched into warm praise of the center's overall program. Convenience of the centers and congeniality of the staff (both professional and non-professional) were the most common reasons given for satisfaction. Comparisons were frequently made between the brusque treatment received at hospital emergency rooms or outpatient clinics and the personalized attention common to the centers.

Numerous patient remarks belied the myth that the poor (at least those using health centers) would prefer, given the opportunity, a private practitioner to most any ambulatory clinic. Every individual I spoke with would continue to use the health center even if private practitioners were available and affordable. Reasons for this preference were remarkably sophisticated: one woman felt that the large numbers of physicians on the centers' staff allowed frequent consultations; another indicated that the private practitioners in the area were, because of advanced age, less likely to be up to date in their medical knowledge than the younger physicians at the center.

At all of the centers I visited, the patient's choice of a physician was restricted in varying degrees. Usually, staffing and scheduling problems require that a patient see whatever physician is available. Although patients have the opportunity to wait until a certain favored practitioner is available (I have no idea how fully aware the patients are of this possibility), the practice rarely occurs. Free choice of a physician would seem to be less important than is commonly imagined.

CHAPTER VI. THIRD PARTY MAXIMIZATION

Complete self-sufficiency through third-party reimbursements, primarily Medicaid, has been abandoned as unrealistic; the message from the ten regions of DHEW now urges "maximize third party". Incentives to do so are entirely negative: a center's funds may be cut by 15%, with the difference to be made up in third-party payments. Unfortunately penury and low tax bases are endemic among states with the greatest health need.

The centers' reimbursement rates are usually negotiated on an individual basis with the state agencies administrating Medicaid programs. In health finances, as in life, (to invoke the words of one administrator) "Them as has, gits". Which is to say that the hospitals and lushly funded medical centers are usually reimbursed at a much higher rate for ambulatory care than the centers. In Chicago, for instance, Cook County's OPDs are reimbursed at a rate of $35 per "encounter" (in that case, use of any health service); the rate set for one of the centers I visited (for the same service) is only $18. The disparity can be traced to:

1. Hospitals spread non-ambulatory fixed costs and unrelated research and educational expenses throughout the OPDs.
2. Hospitals, as a prime locus of the political clout of establishment medicine, enjoy enormous leverage upon state agencies.

Thus, available state funds for Title 19 (Medicaid) reimbursements are often disproportionately available to the hospitals. Worse, and largely unforseen by DHEW in funding the centers, state monies are often unpredictable. At one center, maximization of third party resulted in the state bureau of health insurance's arbitrary and capricious refusal to reimburse for various services during the closing months of the last fiscal year. State funds were alleged to be exhausted.

More common than the complete depletion of state funds are protracted intervals between billing and reimbursements. This causes cash flow to be unpredictable and budget management to be problematic; the centers are uncertain what percentage of claims will actually be paid until state checks are in hand. The enormity of this problem is readily appreciated: the average center derives 37% of its total income from Medicaid.

Thus, the effect of a national health insurance program which eliminates state participation in health care funding could only be salutary. Some of the centers, for instance, are discouraged by state regulations from using new, and perhaps more efficient, types of health manpower. In many states, for example, service performed by a medex is ineligible for Title 19 reimbursement.

Reimbursements from Title 18 (Medicare) average nationally about 6%. Several of the centers I visited had yet to negotiate provider status because anticipated revenues from Title 18 were considered trival. These revenues are more important in rural than in urban areas (9% versus 4% of centers' total revenues) because the urban aged are more likely to:

1. Underutilize services because of psychological barriers
2. Utilize private practitioners
3. Have become habituated to OPDs and ERs.

CHAPTER VII. TRIMMING THE FAT OR SLASHING THE LEAN?

The greatest diversity of opinion on any one topic that I broached during the visits concerned the relative merits of administration by OEO versus DHEW. While all reviews are not yet in, gut reaction to DHEW oversight spanned the emotional gap from knee-jerk hostility through reasoned apprehension to seemingly genuine approval.

Center administrators concurred on only one point: OEO spent faster and more freely. The dollar avalanche was not tied to demonstrable results; innovation was considered more important than predictable outcome. According to Jerome Ashford: "OEO did not require an awful lot in terms of evaluation, productivity, or application review."

Several administrators argued that the open hand of OEO encouraged community involvement, allowed flexibility and breadth in programs, and fostered promising new approaches to health care delivery. The closed fist of DHEW, they claimed, provides only a crass and punitive insistence that dollars translate directly into health services. Ambulatory care under DHEW, the argument goes, is narrowly construed and fails to consider the poverty environment. This attenuated vision, they feel, has locked the centers into simpleminded hardware approaches to complex health problems.

Yet, DHEW does not, as far as I could learn, explicitly prescribe ancillary health-related services. One administrator described subtle pressure toward more traditional health activities: "By reading between the lines, I get the impression that HEW doesn't look kindly upon social services". Cutbacks in outreach funding occur, he claimed, in the name of reducing administrative topheaviness; outreach workers, for budgetary purposes, are considered part of centers' administration.

Advocacy of funding through DHEW was largely based on the permanence of the agency and its emphasis on cost-effectiveness. The continued existence of centers funded by OEO was questionable from the start and became more so as OEO's own future began to appear bleak. That HEW will remain in business goes without saying.

Free and easy spending by OEO was certain to illicit critical reaction from Congress and to come to an abrupt halt, some administrators felt; HEW's use of standardized evaluations encourages performance able to withstand legislative scrutiny.

Yet, no administrator could relate funding to performance. Elaborate evaluative data concerning productivity, costs, penetration and so on is collected but appears to have little impact on funding. Centers which perform either above or below the median for the various indices can expect a similar response from HEW: a budget cut.

It appears that a social Darwinism among programs has been instituted. The centers' budgets are slashed, with the deficits to be made up in third-party reimbursements and more sophisticated program management. Survival depends upon adept accomodation to a continually reduced flow of dollars from Washington.

A staff man for the House Subcommittee on Health suggested that the centers will be funded "because they are there". They had, in his opinion, become status quo; although the number of people using them is relatively small, their support within communities is widespread and vigorous. The centers would benefit by becoming aquainted with this attitude. Many believe that their lease on life expires with each fiscal year, that renegotiation may be impossible. This can only have a negative effect on morale and the recruiting of personnel. At one center the staff wrongly believed financial crisis imminent; operations came to a virtual halt following each distribution of pay checks because workers thought it necessary to rush to the bank before the center's account was depleted. One administrator complained that physicians considering employment at his center would frequently ask "How do I know the center won't fold six months from now?" The administrator believed the only candid answer to be: "You don't".

Confusion seems to exist between yearly budget cuts and complete withdrawal of funding; the former, given HEW emphasis on cost-effectiveness and third-party maximization, is a certainty. The latter, given the political climate, can be discounted as unlikely.

HEALTH

"An Impressionistic Survey of Neighborhood Health Centers"

by

John J. Lucas Jr.

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THE NEIGHBORHOOD HEALTH CENTER: IS LIMELIGHT CONDUCIVE TO GROWTH?

I. WHO IS SERVED?

> "The Neighborhood Health center serves everyone in the target area who is living at the poverty level. In a city, it may deliver its services to a compact neighborhood; in a rural area, to a group of counties. In either case, a well-organized center can provide services for a population ranging from 10,000 to more than 30,000."*

The Economic Opportunity Act of 1964 could be construed, according to one minority faction among OEO health planners, as defining poverty as any income below the national median. It was argued that eligibility for OEO Healthright programs, if the legislative mandate were broadly interpreted, should be extended to "working poor" and lower-middle income populations. Moreover, increased federal funding of health projects aimed solely at the poor appeared unwarranted or inequitable or both (public funding of health services at a level of $200 per capita already was provided poverty and low income groups; this figure was identical to the U.S. national average cost of health care for the entire population).

Opponents of this argument cited the track record of numerous other social welfare programs aimed at several income groups and claimed that "creaming" was invariably associated with inclusion of more affluent populations. Program directors, anxious to demonstrate results, would focus their emphasis on the more tractable mid-income groups (who would be less likely, for example, to miss appointments and more easily convinced of the merit of preventive health measures); serving poverty groups would become of secondary importance. Also, many critics of OEO believed public dollars to be misspent in serving the non-poor. The legislature moved to appease this group:

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*Headings of Chapters I-IV and quotations immediately following are excerpted from a publication of the OEO Healthright Programs, "The Neighborhood Health Center", U.S. Government Printing Office: 1968 0-296-929. It is not a policy manual but a booklet containing simple, straightforward prose aimed at health care consumers. Where it fails to reflect the complexity of OEO policy, it is (more importantly) evocative of the aura of expectations surrounding the early centers.

> Congress in 1967 limited eligibility to low-income families. Accordingly, the 1968 guidelines specified that the standards of "closely related programs" would control eligibility, in effect making the clientele of neighborhood centers consistent with Medicaid standards, which vary from state to state, or with OEO poverty standards, whichever is higher.*

The Centers, then, could serve only populations at or near welfare level income.

Eligibility was the most crucial issue facing the incipient centers. The consequences of its unsatisfactory resolution lie at the center of the entire constellation of problems now faced by the surviving centers.

Poverty populations are not alone in receiving fragmented, curative, episodic, and demeaning health care. Although generally less subject to financial and distributional barriers to access, middle-income groups experience similar health care problems. They may well think of "two-class medicine" as a myth or, more cynically, as a rhetorical web spun to trap government health dollars for a fortunate few.

Middle-income populations experience frustration in their inability to find a family physician or in the need to trek from suburb to suburb to visit a seemingly endless and confusing array of subspecialists. Middle-income groups join the poor in viewing health care as a complex maze of clinics, specialists and hospitals into which they are thrown without anyone to coordinate their care. How many private, primary-care practitioners supervise the in-hospital care received by their middle-income patients or coordinate services with various public and private agencies or provide day care centers for patients' children? How many, if any, organize community boards to ensure patient acceptance of their care or provide social services in an effort to eliminate problems not specifically medical?

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*S.A. Levitan: The Great Society's Poor Law: A New Approach to Poverty (Baltimore, 1969), p. 198.

One DHEW demonstration project provides both Blue Cross and Blue Shield coverage for "working poor"; the plans cover all ambulatory, preventive, and in-patient medical care as well as child and adult dental care. An administrator summed up both the program's accomplishments and my thesis by remarking: "Now the poor have the same lousy health care as the middle class"

The demythologizing of "two-class medicine" does not involve denying that the poor receive health care beset with countless problems (discontinuity, fragmentation, impersonality, demeaning aspects, etc.) but rather, recognizing that the much noted health care crisis does not respect income levels.

The generation of "informed discontent" among health care consumers was central to the intentions of early OEO planners, both at the level of the individual community as well as nationwide. At the local level, "informed discontent" with prevailing health care was to operate through the community board to monitor the center and to guarantee that its programs did not slip into mainstream medicine. At the national level, the self-evident superiority of health care as purveyed by the centers was to generate public outrage at traditional curative and fragmented medical care. This wave of indignation would, it was somewhat naively believed, leave a thousand comprehensive health projects in its wake.

The demonstration was confined initially to a few centers serving exclusively poverty populations. Impact upon vested provider interests was marginal and followed almost exclusively from the projects' narrow base of support (broad and enthusiastic among the poor who are served, miniscule among the population at large). Ample evidence confirms my underlying assumption that the superiority of the comprehensive health project (as envisioned, not always as implemented) is self-evident, but only among groups served.

The complete absence of pressure within the federal government to end the programs is most striking. The existing centers (not proposed starts or expansions) have become status quo, serving over a million individuals and employing thousands; political careers, it is clear, may be imperiled if the centers are threatened. Although budget cuts frequently occur, funding of the centers (less lushly than in the 60s, but sufficient to guarantee survival of all but the most problem-plagued) will continue, as one House Subcommittee on Health staffman put it, "because they are there."

The comprehensive health projects are moving toward sliding fee schedules (Table I* is a fee schedule now in use at an urban center); this move is often made reluctantly and with little anticipation of attracting great numbers of paying patients. Such pessimism is probably more warranted in urban areas than in rural; many urban centers are located in inner-city areas avoided by those who can afford to. Urban comprehensive health projects must compete for the health dollars of the "working poor" with outpatient clinics and private practitioners. At the average urban center, 7% of registrants are able to provide partial cash payment for health services. This figure is 14% at rural projects (See Table II).

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*For Table I, see Pgs. 6-7.

The sliding fee schedule arouses hostility among many of the poor served by health centers. For instance:

> ...quite a few centers vigorously oppose such steps since they feel that the mixture of non-poor patients (who can afford to pay for services) with poor patients (who cannot) will eventually place the poor right back in the disadvantaged position of second-rate citizens receiving a handout, exactly the situation which prompted the development of the Neighborhood Health Centers in the first place.*

This would become a problem only if preferential scheduling is allowed those who pay and providers become overly conscious of patient income.

Understaffing is a more appropriate concern. The centers were initially staffed to serve the entire population of their target area. It was found however, that even in some of the most abysmal of inner cities, only 40% of the population was eligible for services under OEO poverty guidelines. Staffing was gradually brought into line with the reduced number of eligibles.

The inclusion of significant numbers of "working poor" in the present system is more likely to exacerbate problems of understaffing than of "second-class citizenship". Although the marginal dollar cost of providing one extra medical encounter is low (assuming a majority of centers' costs are fixed and that no additional personnel are hired), the opportunity costs of providing many extra units of service are high. Consider: waiting time, already a matter of serious concern, is likely to increase, and team care would become increasingly more difficult to

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*Paul R. Torrens "Administrative Problems of Neighborhood Health Centers," Medical Care 9, (November/December 1971); p. 487-497.

TABLE 1

FEE SCHEDULE COMPUTATION
PATIENTS' CATEGORY BY INCOME LIMIT

Family Size	A	B	C	D	E	F	G	H	I
	Up to 2,100	2,201-2,725	2,726-3,450	3,451-4,200	4,201-4,925	4,926-5,550	5,551-6,200	6,201-6,850	6,851-7,500
1	0	10%	20%	30%	40%	50%	60%	70%	80%
2	0	0	10	20	30	40	50	60	70
3	0	0	0	10	20	30	40	50	60
4	0	0	0	0	10	20	30	40	50
5	0	0	0	0	0	10	20	30	40
6	0	0	0	0	0	0	10	20	30
7	0	0	0	0	0	0	0	10	20
8	0	0	0	0	0	0	0	0	10
9	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0

Source: Franklin C. Fetter, Family Health Center, Charleston, South Carolina.

TABLE 1 (cont.)

FEE SCHEDULE COMPUTATION
PATIENTS' CATEGORY BY INCOME LIMIT

J	K	L	M	N	O	P	Q	R	S
7,501- 8,150	8,151 8,800	8,801- 9,450	9,451- 10,100	10,101- 10,750	10,751 11,450	11,451- 12,100	12,101- 12,750	12,751- 13,400	13,401- 14,050
90%	100%	100%	100%	100%	100%	100%	100%	100%	100%
80	90	100	100	100	100	100	100	100	100%
70	80	90	100	100	100	100	100	100	100%
60	70	80	90	100	100	100	100	100	100%
50	60	70	80	90	100	100	100	100	100%
40	50	60	70	80	90	100	100	100	100%
30	40	50	60	70	80	90	100	100	100%
20	30	40	50	60	70	80	90	100	100%
10	20	30	40	50	60	70	80	90	100%
0	10	20	30	40	50	60	70	80	90%
0	0	10	20	30	40	50	60	70	80%
0	0	0	10	20	30	40	50	60	70%
0	0	0	0	10	20	30	40	50	60%
0	0	0	0	0	10	20	30	40	50%
0	0	0	0	0	0	10	20	30	40%
0	0	0	0	0	0	0	10	20	30%
0	0	0	0	0	0	0	0	10	20%
0	0	0	0	0	0	0	0	0	10%
0	0	0	0	0	0	0	0	0	0%

TABLE II

MEDICAL PROVIDER PRODUCTIVITY

	MD Per 1000 Reg.	MD Encounters Per MD	
		Per Quarter	Per Day
All Rural			
Medians	0.5	876	15
IQR From	0.4	670	11
To	0.6	1,103	19
All Urban			
Medians	0.7	662	11
IQR From	0.5	566	9
To	0.9	803	13

implement, as would the continuous personal services the centers attempt to emphasize.

The impact of the sliding fee schedules on waiting time, continuity of care, etc., will be negligible if (in order of probability):

1. The centers, either by virtue of location or stimatization as "welfare clinics" or both are shunned by low-and moderate-income families.
2. Excess capacity is consonant with that claimed by the centers' various detractors (e.g. OMB, GAO)
3. Extra income generated by partial payment schedules is converted to additional professional staff

Stigmatization as "welfare clinics" and the location of permanent facilities follows historically from the center's initial role of serving only the poor. Whatever "welfare" stigmata the centers bear (in the eyes of low-and moderate-income groups) can be healed with time and imaginative program marketing. The location of the centers, however, cannot be changed (barring those still housed in trailers) and presents the greatest barrier to "partial pay" patients. Had the centers originally intended to serve broad income categories, locations at the periphery rather than the center of urban ghettoes would have been feasible. Quality care housed in the most attractive and modern buildings cannot draw significant numbers of non-poor if the centers are located in squalid or dangerous areas (e.g. Mile Square in Chicago's West side).

Excess capacity may be more prevalent in urban centers, judging from their low level of MD productivity relative to rural centers (See Table III). Urban centers, then, may be able to serve greater numbers of non-poor

TABLE III

MEDICAL STAFFING

Ratio To MD
Mid-Level Provider

		Nurse
All Rural		
	Medians	2.4
	From	1.9
IQR	To	2.7
All Urban		
	Medians	1.4
	From	0.9
IQR	To	1.9

but must compete for the health dollar with other sources. Rural centers generally face less competition. It should be noted, however, that lower MD productivity in urban centers may reflect less the use of mid-level providers and nurses rather than excess capacity (see Table IV).

Income derived from partial payments as well as third-party reimbursements is intended, according to recent pronouncements from DHEW, to be used for various worthy ends. They are:

1. To increase the number of persons served
2. To increase the number or range of reimbursable services provided
3. To improve the quality of the services
4. To develop and maintain a reserve fund
5. To improve management and operation capabilities*

This means that whatever additional income the centers are able to generate is not to be subtracted from future grants. Yet, with budget cuts occurring independently of performance (including ability to acquire extra income), the centers are unlikely at present to do much expanding.

If the centers do enhance their financial position through the sliding fee schedule, recruiting additional professional personnel remains problematic. Apart from a seemingly infinite stream of foreign medical graduates (who, when employed by the centers, are often employed reluctantly), many centers cannot recruit additional physicians. Physicians, not dollars, are in short supply. Although the centers' salaries are competitive with other institutional settings, institutional settings are generally less attractive to physicians than other options.

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*Federal Register, Vol. 39; No. 6 p. 1442; January 9, 1974.

TABLE IV

PRIMARY BILLING STATUS

Percent Of Registrants

	Total Regis-trants	Total Medicaid	Total Medicare	Public Assis-tance	Private Insurance	Cash Partial	Cash 1000	Other Source	314-e Grant Support pays	Net Determined
All Rural										
Medians	8,229	24	9	0	3	14	0	1	49	0
Range From	3,527	2	0	0	0	0	0	0	0	0
Range To	19,491	30	16	4	21	29	41	37	96	34
All Urban										
Medians	10,561	46	4	0	4	7	0	2	35	2
Range From	224	0	0	0	0	0	0	0	0	0
Range To	139,844	89	15	68	27	56	30	29	82	38

This constraint may be lifted with the passage of one of the several medical manpower bills now in the legislative mill. For instance, the Kennedy Bill (S.3538), the Roy Bill (H.R. 14721) and the Rogers Bill (H.R. 14357) variously require or encourage M.D.s to locate in underserved areas. The centers are likely to benefit by the passage of any of these bills, but will not reap a windfall; many physicians, ill at ease with the administrative superstructure of the centers, will choose private or small-group practice.

Summary: Who is served?

Judging from "primary billing status" data, the centers have yet to score significant successes in marketing their services to the non-poor. Insofar as this information reflects trends accurately (many centers have yet to institute partial payment schedules), the rural centers are reaching more "non-poor" people than the urban centers (14% of registrants at the average rural center pay cash for part of their health care vs. 7% at the average urban center). The assertion that urban centers serve few non-poor is supported most strikingly by demographic data (see Table V); if Black and Spanish-speaking are taken as rough surrogates for the poor, only 8% of the registrants at the average urban center are non-poor.

The centers also fall short in marketing their services to the aged. Although 17% of all U.S. poor are over 65*, only 9% of the registrants at the average rural center and 6% at the average urban are 65 or older. (See Table VI).

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* U.S. Bureau of the Census, 1971.

TABLE V

DEMOGRAPHIC DATA: RACE/ETHNICITY

		Percent Of Registrants			
		Non-Spanish-Speaking			Spanish-Speaking
	Registrants	Black	White	Other	
All Rural					
Medians	8,229	51	47	2	0
IQR From	4,672	1	8	0	0
To	10,407	75	52	1	4
All Urban					
Medians	10,561	91	7	1	1
IQR From	6,854	28	2	0	0
To	21,987	93	19	3	32

TABLE VI

DEMOGRAPHIC DATA: AGE/SEX

		Percent Of Registrants								
		All Individuals						Age/Sex	Females	
	Registrants	<1	1-4	5-14	15-44	45-64	65 and over	Not Determined	All Ages	15-44
All Rural										
Medians	8,229	1	9	27	41	13	9	-	54	22
IQR From	4,672	1	8	24	37	12	6	-	52	20
To	10,407	2	11	28	42	16	11	-	58	25
All Urban										
Medians	10,561	2	11	27	43	11	6	-	57	26
From	6,854	1	9	23	39	10	5	-	55	24
IQR To	21,987	2	12	30	44	13	8	-	59	27

II. HOW ARE THEY SERVED?

> "In order to evaluate each family realistically and to understand how the problems of one member may affect the health of the others, many Centers group their professional staff into family care teams...Except for emergencies, all patients are seen by appointment...(the patient's) personal physician continues his medical responsibility for the patient during hospitalization...."

The family care team is, in theory, a sound response to several problems common to community health centers. The teams would effect a suitable balance between comprehensiveness of services (emphasis on vast resources and efficiency) and continuity and personalization of care (emphasis on "provider-patient" relationship and human-scaled facilities). Each team would generally include an internist or family practitioner, a pediatrician, dentist, public health nurse or social worker, and several family health aides; although turnover among personnel could be high, the patient would have an ongoing relationship with at least one member of the team.

Often impersonality of services and the sheer size of a center's physical plant are strongly associated: cavernous waiting areas, endless corridors, and the frenetic activity of uniformed armies of strangers reinforce the tendency to think of obtaining health care as an inherently unpleasant experience. The effects of physical size can be minimized, however, if each team has its own offices and waiting room; thus, even a large urban center (for example, Southside in Atlanta) can create an intimate, personal atmosphere.

The team approach is not inherently incompatible with comprehensiveness and (given proper program management) efficiency. The various major specialties, such as orthopedics, obstetrics and gynecology, would be represented in a separate "specialty team". Another group--a "walk-in" team--would care for patients without appointments.

In spite of seemingly overwhelming advantages, use of the team approach is the exception rather than the norm among community health centers. Poor program management and (to a lesser extent) shortages of professional personnel make team care unworkable at most centers. The scheduling of appointments in order to assure smooth patient flow is particularly dependent upon program management. Many centers have been unable to cope with the high number--about 40% at most places--of broken appointments and walk-in patients.

Team practice aggravates scheduling problems, because each individual team experiences uneven patient flow. Team A may have too many patients waiting while Team B has too few; using one large reception area and having patients see the first available physician is generally considered essential to optimizing erratic patient flow. This strategy, of course, precludes ongoing contact with any one physician.

Monitoring of in-patient care varies greatly: at one extreme, many centers will receive some of their patients' hospital records some of the time, while other centers will consistently supervise the in-hospital care received by their patients. Some rural centers, for example, maintain offices in, or adjacent to, the distant hospitals to which their patients are referred. Other centers encourage their physicians to visit hospitalized patients; rarely, however, are center physicians directly responsible for hospital care. The lack of direct responsibility is attributable to the following factors:

1. Medical staff at many centers do not have hospital privileges
2. Most centers have inadequate numbers of physicians to assign one or more to the hospital
3. Very few centers have funds to provide in-hospital care.

At least one center with some in-patient funding has a full time physician based at the hospital to monitor costs (e.g., Is the patient assigned to an intensive care unit longer than is necessary?). Cost-control incentives of this sort provide countervailing pressure to the hospital's primary interest in keeping its beds filled and should be further investigated.

III. HOW IS THE CENTER FINANCED?

> "The financial support which a Center receives through its grant from the Office of Economic Opportunity represents only a segment of its total financing...it make(s) use of all existing sources of health funds, encompassing Federal, state, and local programs...As the Center strengthens its resources, its needs for OEO support can be expected to diminish...eventually Neighborhood Health Centers can operate without OEO subsidy."

The expectations expressed above have been shown to be unwarranted over a period of several years. The severence of the umbilical cord tying the centers to OEO grants (or their successor, 314e) was predicated on two assumptions:

1. that Medicaid and Medicare were the beginnings of a workable national health insurance and,
2. that the infinitude of government and private agencies dealing with health would coordinate their efforts.

The inadequacies of Medicaid and Medicare are, of course, legend. The centers' primary complaint is with Medicaid, as Medicare accounts for only a miniscule portion of their total revenues. However, it is impossible to generalize about the centers' relations with the various state agencies administering Medicaid. A few state agencies are willing to set up Medicaid registration desks at the community health centers. Other agencies have as much as warned the centers that they will be cut off without a cent if they try to register additional patients. The norm lies roughly mid-point between hostility and amity.

Eligibility for Medicaid, as construed by the centers, is frequently at variance with the views held by the state agencies; the centers, under the banner of "third-party maximization", have powerful incentives for getting their patients registered. State agencies, however, often emphasize limiting Medicaid enrollment rolls; some agencies, for instance, recertify patients as often as once a month, although the average is once every 90 days. Numerous man hours are wasted at the centers in getting and keeping their patients registered, and in reprocessing claims rejected because of expired coverage or incomplete information.

Numerous pieces of legislation (including the OEO Act of 1964), countless statements by cabinet officers and agency heads, and a spate of policy directives have failed to make a significant impact on the bureaucratic Balkanization characteristic of government health programs. One neighborhood health center reported having to deal with six federal, two state, and three local agencies over three years of operation. Each agency, with its own guidelines, application procedures, and review processes, was indifferent to the existence of the others. This center, having spent over $51,000 merely in applying for the next year's operating funds, "whimsically" requested a budget which included a full-time grantsman at $20,000/year. DHEW and OEO, to the center's startled surprise, were agreeable to the grantsman, but completely disinterested in streamlining the granting process.*

Anecdotal evidence of bureaucratic Balkanization abounds. Development of pre-paid group practice at Johns Hopkins involved applying to and negotiating with 12 different administrative agencies who demanded

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*Source: Harvey I. Sloane: "Can We Cut the Red Tape? Or Must We Strangle?" A.J.P.H. 61, 5: 887-892 (May 71).

> "...at least 10 different combinations of benefits associated with an equal number of eligibility combinations, in at least five major financing programs, each with its own administrative procedures...these tasks had to be undertaken in conjunction with 'full community participation' for which there existed at least three different administrative and operational definitions."*

The advent of national health insurance will reduce the current multitude of eligibility requirements to a manageable number but will not, of course, have any effect on funds for non-reimbursable services.

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*Source: R.J. Blendon and C.R. Gans: "Problems in Developing Health Services in Poverty Areas: The Johns Hopkins Experience" J. Med. Ed. 46: 477-484 (May 71).

IV. WHAT DOES IT MEAN TO THE HEALTH PROFESSIONS?

> The Health Center provides the members of its professional staff the opportunity to deliver health services in a new social climate which fosters warm, personal, sustained relationships with patients...the health professional can develop a sense of close identity with the community in which he practices. His concern with the patient does not stop at the door of his office but extends outward to the patient's total environment.

The early response of the American Medical Association to neighborhood health has been termed "schizophrenic". Shortly after OEO guidelines were published, Dr. Charles Hudson, AMA President, spoke for his organization when he warmly endorsed the concept. His successor, Dr. Milford O. Rouse, castigated the centers and their underlying assumption that health care is a "right--not a privilege."*

Although the medical profession has traditionally been willing to dispense with nonpaying patients, much confusion surrounded the issue of who the first centers would serve. In many areas, alarmed physicians viewed the incipient centers as a threat to their practices. The Denver Medical Society, for example, estimated in 1968 that 51% of Denver's population would be eligible for free care at the city's two OEO neighborhood health centers.** Later policy directives proved this figure to be somewhat inflated, but for several months Denver's 1,500 private practitioners anticipated either losing much of their income or working in an OEO clinic.

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*Levitan, op. cit., p. 199.

**David Kasanof: "Antipoverty Medicine: Atlanta to Washington" Medical Economics, July 8, 1968, p. 123-143.

Although community action agencies (the most frequent recipient of health center grants) almost invariably chose medical institutions to administer the centers (See Table VII) many provider groups felt they had been by-passed in the planning stages. Given knee-jerk hostility among certain factions of the medical profession, both informal and organized, it is not clear that any degree of provider involvement in setting up the first centers would have assuaged their misgivings.

Overt hostility among professional groups may have also been triggered by latent apprehension concerning loss of clout with government health administrators. Organized medicine's grasp on program purse strings is generally enhanced by cozy relationships with state administrators. For instance, one study of 314(d) grants concludes that: "Innovations only occur when high level professionals in positions of power are willing to be identified with them. Only in this way can state administrators be sure that they can gain professional approval for their actions."*

These paternal ties do not bind professional elites to neighborhood health centers; professional groups are denied a gate-keeper role because dollars flow to the centers without state stopovers. In order to reduce withdrawal symptoms, the 1967 OEO amendments specified that the opinions and recommendations of local medical associations will be solicited and considered prior to the approval of new projects. The AMA's Council on

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*Lawrence Susskind: Decategorization and the Emergence of Bureaucratic Impediments to Institutional Reform, Department of Urban Studies and Planning, Mass. Institute of Technology, April 74 (unpublished).

Medical Service was not placated by conciliatory promises; noting the absence of means to enforce that requirement, the Council warned that medical societies desiring "...early involvement in planning may have to develop new contacts and liaisons within the communities they serve."*

It is now clear to practically everyone (except, perhaps, the most reactionary of county medical societies) that community health centers do not threaten fee-for-service medicine and are not the dreaded "foot-in-the-door" to a national health service (invariably termed "socialized medicine" in professional group jeremiads). Perhaps for this reason (and a desire for "a piece of the action"), the American Medical Association now concedes that "in general, the community health centers are serving as another effective means of providing adequate health care to more people." Not surprisingly, an AMA "task force" found that "active involvement of and support by...local medical associations" tended to enhance the success of individual centers.**

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*Council on Medical Service, American Medical Association: "Report B: Neighborhood Health Centers," 1968 Clinical Convention, p.5.

**A.M.A. Council on Medical Service, Committee on Community Health Care: Community Health Delivery Programs, 1973, p.9.

TABLE VII

Grantees and Administering Agencies of Neighborhood Health Centers, July 1968

	Grantees	*Administering Agencies*
Total	48	49[a]
Community action agencies	32	2
Hospitals	4	13
Medical schools	3	10
Health departments	0	7
Medical societies	1	2
Group practice	1	3
New Health Corporation	1	8
Other nonprofit agencies	6	4

[a] Includes one instance of joint administration.

Source: Community Action Program, Office of Economic Opportunity.

V. IMPROVING THE IMMUTABLE

That neighborhood health centers should stimulate informed discontent with curative, episodic, and fragmented health care was one of the fondest hopes voiced during the early OEO years by center advocates. In the dazzling limelight generated by great expectations, onlookers were uncritical. The fatuity of this hope was largely unappreciated.

Similarly, the appearance of the centers on the health scene was to effect a rapid about-face in the use of preventive services among the poor. The underlying assumption was that comprehensive, continuous, and community-controlled care could change deeply ingrained habits, habits reflecting more an orientation to life than an attitude toward health care. Visits to individual centers confirmed my suspicion that the community health center, with its comprehensive array of health and social services, is a necessary but not sufficient instrument of change. This would be completely unremarkable and hardly deserving of comment if it did not clash so stridently with much of the evaluative literature.

For instance, if one can judge from data meticulously assembled by DHEW, it is possible to quantitate changes in health behavior that occur from one quarter of the year to the next. During the third quarter of 1973, the median rate of preventive MD encounters nationally was 11% (i.e., preventive MD encounters as a percentage of all MD encounters). The "prevention rate" obligingly rose to 12% during the fourth quarter of that year.*

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*Comprehensive Health Services Projects Data Base Report, Third and Fourth Quarters, 1973, Office of Monitoring and Aanlysis, BCHS, USDHEW.

According to almost every physician I spoke with at the centers, fundamental changes in health attitudes (as demonstrated, for instance, by increased use of preventive services) would only become apparent over several generations of patients. Attempts to document short-term improvements were considered pointless. Lifestyles characterized by day-to-day coping with imminent crisis preclude, in the opinion of these physicians, ongoing attention to health maintenance.

The prediction that future generations might benefit stemmed from the emphasis at many centers on getting health services to children. Many aggressive outreach programs focused on children and encouraged broad participation in periodic screenings and routine immunizations. Preventive dentistry is new to most poverty communities; at several centers mothers touted the dental program, frequently remarking that, while their own teeth were in hopeless shape, services available at the center would allow their children to keep their natural teeth throughout adulthood.

Behavior is generally more tractable than attitude. To this end, various carrot and stick incentives are employed at many centers. One center, for instance, offers fresh eggs, cheese, milk, and hot and cold cereals to children under four years of age and to pregnant and lactating women if and only if they participate in prenatal and well infant and child programs. This inverse Skinner box wherein one receives services in order to be rewarded with food apparently raises no hackles among the community board.

New registrants at another center must undergo a complete health assessment before treatment for their presenting complaint. I assume this rule is waived if the presenting complaint is an emergency. Participants in one prepaid program are warned that missing appointments chronically is grounds for loss of program membership. A brief glimpse of this stick has proven sufficient to reduce missed appointments; it has never been necessary to wield it.

VI. PROVIDER PRODUCTIVITY

The sixty-plus centers reporting data to DHEW, Bureau of Community Health Services, have a median of 11 encounters per physician day. This figure, roughly half the national average, provides ammunition in overkill measure for those sniping from the sidelines at community health centers.

The latest round in this barrage comes from GAO; that agency finds a great deal of unused standby capacity in centers staffed to handle large patient loads that have not materialized. This charge is vigorously, but somewhat lamely, rebutted by center administrators who blame high broken-appointment rates, multi-problem patients, and abuses (late arrival, early departure) by part-time physicians. Critics in turn counter these arguments with:

1. Why, if broken appointments are a problem, don't the centers overschedule their services?
2. Private practitioners also see multi-problem patients apparently without decreased productivity;
3. Why hire part-time physicians at all?

Several points should be made in defense of the centers, some verified during my visits, others suggested by the literature. First, centers cannot overschedule their appointments without extending waiting time, already a source of much concern. Contrary to the conventional wisdom, not only the "time-poor" middle class see waiting time as a barrier to entry. Replacing one set of barriers (finance and access) with another (waiting time) is a pointless juggling of inadequacies, an expensive variation on a theme of underutilization.

It is generally conceded that the poor are exposed to more gross factors associated with disease (e.g., poor nutrition, housing, stressful environments) and appear to experience more of certain diseases (for example, mental illness and, among blacks, hypertension). Because data of this sort are subject to a diversity of interpretation, they provide precarious support for low productivity due to "more disease." For instance, some researchers insist that the poor merely "...feel sicker than persons of a higher [social class]" without actually experiencing more disease.* Others maintain that the poor actually have less of certain diseases than would be expected for populations of the same age. Citing data from the National Health Examination Survey on heart and arthritic conditions (the two leading causes of activity limitation), Lefcowitz argues that the relationship between morbidity and poverty has not been proven. Many diseases, he claims, are less prevalent among poverty groups; for example, the prevalence of definite hypertension and coronary artery disease is relatively low among white males in the under $2,000 income group.** (See Table VIII; a negative number indicates less disease than would be expected.)

Defenders of the centers would argue that it matters little whether the poor as a group merely feel sicker or are in fact sicker. Personal health habits (perhaps arising from such barriers as lack of access or ability to pay or the depersonalized services found at traditional sources of care such as ER hospital and OPDs) cause the poor, even if

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*Kadushin, Charles: "Social Class and the Experience of Ill Health" Sociological Inquiry, 34, 1 (Winter, 1964), pp. 67-80.

**Myron J. Lefcowitz: "Poverty and Health: A Re-examination," Inquiry, 16, 1 (March 1973), pp. 3-13.

TABLE VIII

DIFFERENCE BETWEEN ACTUAL AND EXPECTED* PREVELANCE RATES PER 100 ADULTS OF SELECTED DISEASE CONDITIONS BY FAMILY INCOME, SEX, AND RACE, 1960-1962

Disease Conditions	Family Income				
	Under $2,000	$2,000-3,999	$4,000-6,999	$7,000-9,999	$10,000 and over
Definite Hypertensive Heart Disease					
White Men	-0.5	-0.8	0.7	-1.8	1.4
White Women	3.8	-0.3	-0.7	-2.1	0.1
Black Men	8.2	-6.6	-2.2	-6.9	11.9
Black Women	2.7	-2.2	0.8	-6.4	-2.9
Definite Hypertension					
White Men	-1.6	0.4	1.0	-0.5	-1.6
White Women	4.9	-0.7	-1.2	-0.7	-1.6
Black Men	7.3	-5.4	-3.4	-13.8	6.5
Black Women	4.3	1.9	-6.0	-0.4	-5.6
Definite Coronary Heart Disease					
Men	-0.8	0.2	0.9	0.2	-1.7
Women	0.6	0.3	0.2	0.2	-1.2
Osteoarthritis					
Men	-2.8	0.3	-0.4	1.5	0.5
Women	0.5	0.0	-0.2	-1.0	2.0
Rheumatoid Arthritis					
Men	3.0	-0.5	-0.6	-0.2	-0.1
Women	0.0	-0.5	0.7	-0.5	-0.5

*Standardized for age.

Source: Myron J. Lefcowitz: "Poverty and Health: A Reexamination", Inquiry, 16,1 (March 1973) p. 3-13.

gross barriers to care are removed, to generally seek care at a relatively advanced stage of the disease process. As one administrator remarked: "Blood and severe pain are this center's most effective outreach workers."

As disease progresses, the argument goes, involvement of additional systems becomes likely. Physical assessment and management of the condition becomes more complicated, requiring more physician time. Similarly, familiarizing the patient with the therapy becomes increasingly time-consuming and is delegated to paraprofessionals only at risk of losing its impact on the patient. Patients, according to one medical director, frequently say that a set of instructions "...must be important because you spend so much time explaining it to me." Active participation in therapy must be encouraged; little purpose is served in diagnosing nephrotic edema, for example, and prescribing a low sodium diet if patient compliance is lacking.

Yet, if low physician productivity is related to the health status of poverty groups, it is reasonable to assume that centers with high percentages of new registrants (needing health assessments and diagnosis of multi-problems) would exhibit lower provider productivity than centers with relatively stable patient populations. Similarly, it would be reasonable to assume that productivity of part-time physicians would be lower than that of full-time physicians if administrators are correct in tracing a significant share of their productivity problems to part-timers. Data of this sort has yet to be collected; until it is, skepticism of low productivity traced to "more complicated disease" and "too many part-time physicians" is entirely warranted.

I would argue, on the basis of what I've seen at a dozen centers, that physician overstaffing is uncommon, and that its existence as a problem is most likely to be corrected throu[illegible] substitution of another problem, understaffing. With the current and perhaps permanent seller's market in physician services, further motivation of understaffing is unwarranted. Market conditions are strongly associated with another productivity constraint largely ignored in public discussion which assumes, in the words of one medical director, that physicians "drop into the centers like manna from heaven." Physicians are scarce (at least those willing to serve poverty populations in less desirable locales), independent, and highly mobile. Administrative pressures to increase productivity risk the discontent and departure, contract or not, of the medical staff.

Another error which underlies the public discussion relates to the use of the productivity of the private practitioner as a standard of comparison. Discussion errs in employing this benchmark for two reasons:

1. productivity defined in the narrowest sense, encounters per physician day, is strongly associated with economic incentives for the practitioner to increase patient volume which in turn is associated with...

2. quality of care, demonstrably second-class among solo practitioners as compared to other sources of medical care, including community health centers.*

This disparity in quality is likely to be particularly pronounced in poverty areas with their concentration of "Medicaid mills." It should be expected that community health centers compare poorly in gross physician productivity with the high volume, discontinuous care common among their counterparts in private solo practice.

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*Mildred A. Moorehead et al.: "Comparisons Between OEO Neighborhood Health Centers and Other Health Care Providers of Ratings of the Quality of Health Care," A.J.P.H. 61, 7 (July 1971), pp. 1294-1306.

Summary: Provider Productivity

The centers compare miserably with the national average of medical encounters per physician day. This is taken to be evidence of endemic boondoggle or of the health status of poverty populations and the tight market for physicians willing to practice in underserved areas, depending upon whether one is a budget examiner at OMB or a program director of a community health center.

Public discussion of community health centers is handicapped by lack of an adequate productivity standard; the index of encounters per provider day is more appropriate to River Rouge than to Mile Square. Such an index fails to reflect, for instance, numbers of new registrants likely to need time-consuming health assessments and the like.

Comparisons between the productivity of health center physicians and solo practitioners is suitable only if quality of care is assumed to be equal. It is not.

Pressures from the various bureaucracies to increase productivity through, for instance, limiting part-time professional staff, fail also to consider the market for physician services. Part-time personnel are frequently employed, even though they are alleged to be a common cause of low productivity, because the centers either cannot recruit full-time physicians or do not need certain specialists (e.g., urologists, opthalmologists) full time.

Administrative pressure on physicians to increase productivity is often disproportionate to the amount of slack at the level of the individual practitioner (barring, of course, "time-clock" abuses such as tardiness and absenteeism). Many physicians are attracted to the centers rather than to fee-for-service practice because they can spend more time with each patient; pressure to increase productivity is likely at best to be unproductive and at worst to cause a provider exodus. Productivity increases will derive primarily from innovations at the level of program management and leadership (e.g., reducing broken appointments and "walk-ins").

SOME CONCLUSIVE COMMENTS

No longer fashionable, neighborhood health centers have quietly slipped into status quo; the mantle of fashion has descended, perhaps ephemerally, upon the HMO. The centers, although shunted out of the limelight, have not gratified their various detractors. Rather, the centers have turned in generally creditable performances; overall evaluation does not appear to have significantly suffered from the somewhat naive aspirations which colored their early mandate.

Although the short-term prospects may appear bleak at the level of the individual center, seemingly punitive budget cuts may motivate program sophistication and enhance survival under the much-awaited national health insurance. NHI, however, will not by itself prove a guarantor of durability; the centers will continue to face many of the current resource problems (see Flow Charts). A few marginal centers can be expected to succumb to the withdrawal of 314e funds; the majority, however, will find their positions strengthened by NHI through permanent dollar flow and the franchise provided to low-and moderate-income groups.

As demonstrations, the community health centers have provided several fundamental lessons regarding "two-class evaluation" and the counterproductivity of inflated expectations. The centers have contributed significantly in charting some of the hazards in quantitating the impact of health services _per se_ on health status. Public discussion of contemplated health care projects, if it draws upon the experience of the centers, should not expect health services to accomplish in the public sector what they are generally unable to do in the private sector. Such discussion will acknowledge the self-limiting nature of most complaints which cause the patient to seek medical care, and that most often the physician can only administer the therapeutic equivalent of "tea and sympathy." Funding of health care delivery for poverty populations will not happen because we anticipate saving public dollars but because, as Rashi Fein puts it, we are decent and humane people.

Drawing from the experience of the centers, both the distortion consequences and the potential inequity of quantitating output of health care projects will be appreciated. Rationale for health programs benefiting primarily poverty groups may be expected to reflect an understanding that: "(t)o insist that for them, and for them alone, demonstrated effectiveness be the criterion in planning becomes heresy in an egalitarian society."* Community health centers, one can reasonably expect, will be instrumental in the ultimate demise of "two-class evaluation" and may help us to live comfortably with the fact that quantification of the impact of health services on health status is treacherous at best and impossible at worst.

Until the concept became unfashionable when a (somewhat premature) cease-fire was declared in the War on Poverty, the Cycle of Poverty was to be broken, in part, by community health centers. The original centers were alleged to be able to influence not only health status but unemployment, social unrest, family disorganization, and illiteracy. We may, by now, have learned enough to discount as irresponsible oversell suggestions that community controlled health centers can, for instance, be used as "...a vehicle (the poor) can use to improve conditions in the community.**

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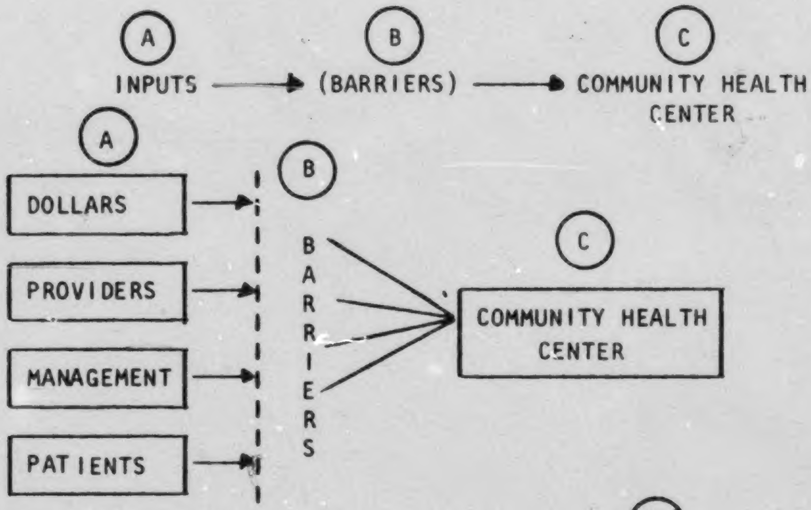
*Avedis Donabedian, Aspects of Medical Care Administration: Specifying Requirements for Health Care, Cambridge, 1973, p. 192.

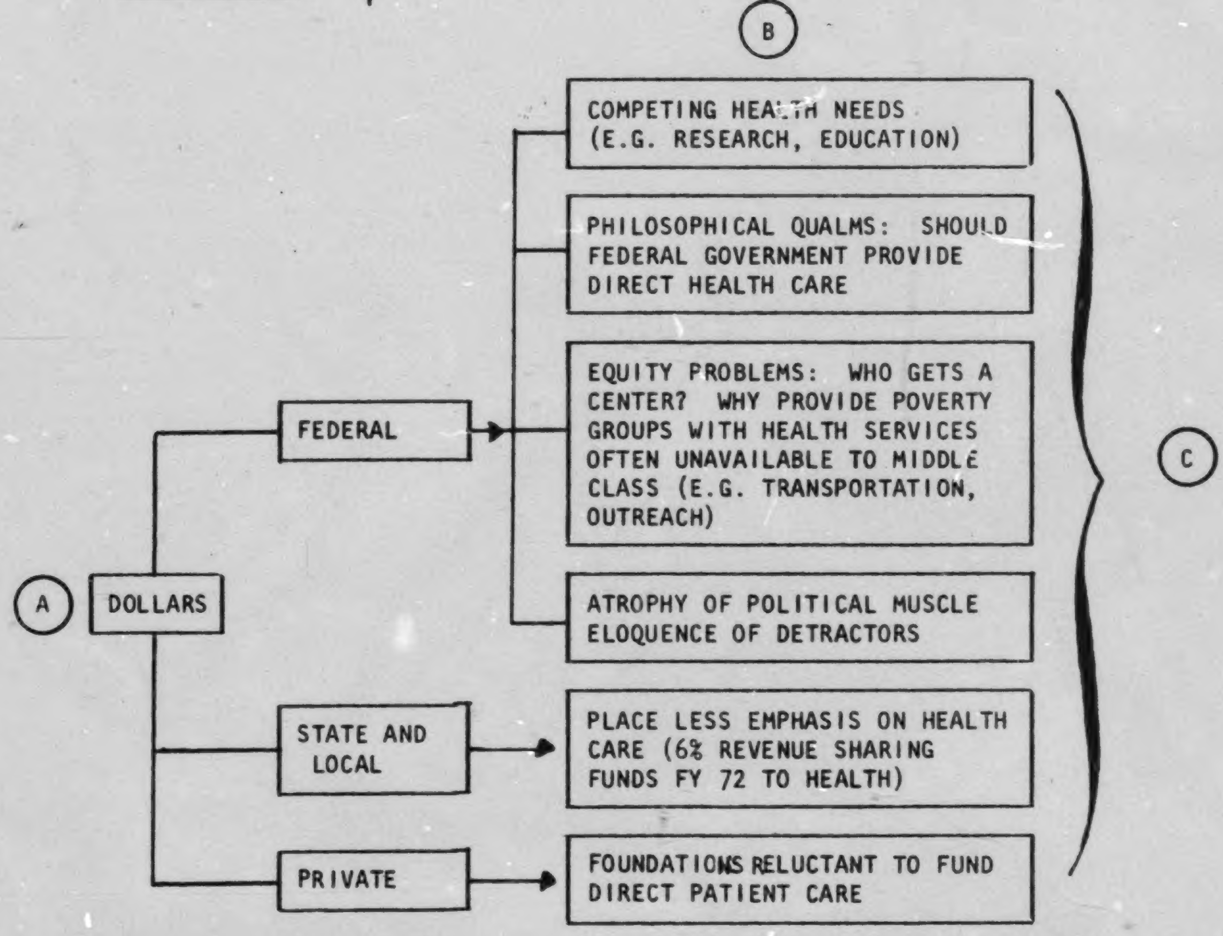
**Evaluations of the War on Poverty Health Programs, General Accounting Office Report UR-047, 1969, p. 61.

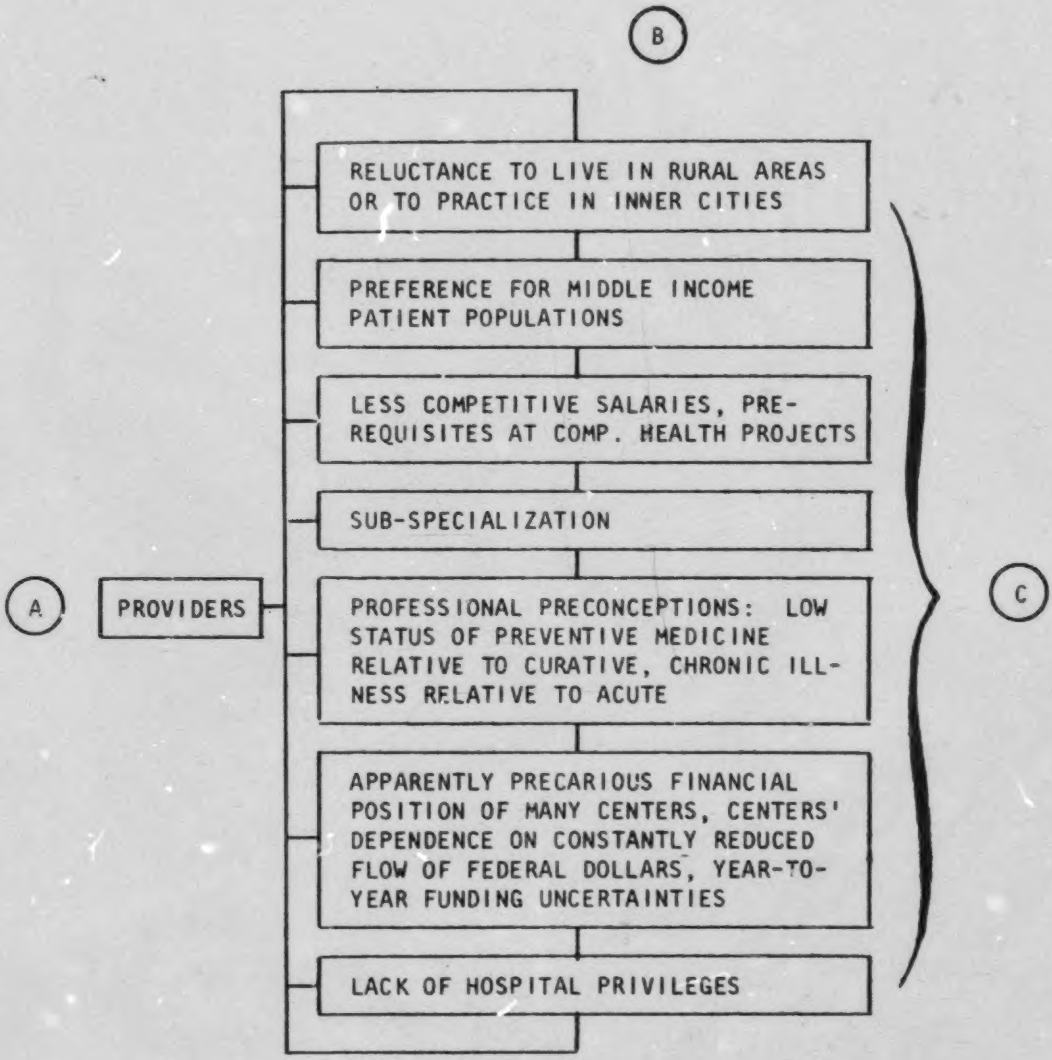
Where this happens, well and good; but continued funding of such projects should not be contingent upon the realization of inflated expectations. Health services and the millenium must remain separate and distinct.

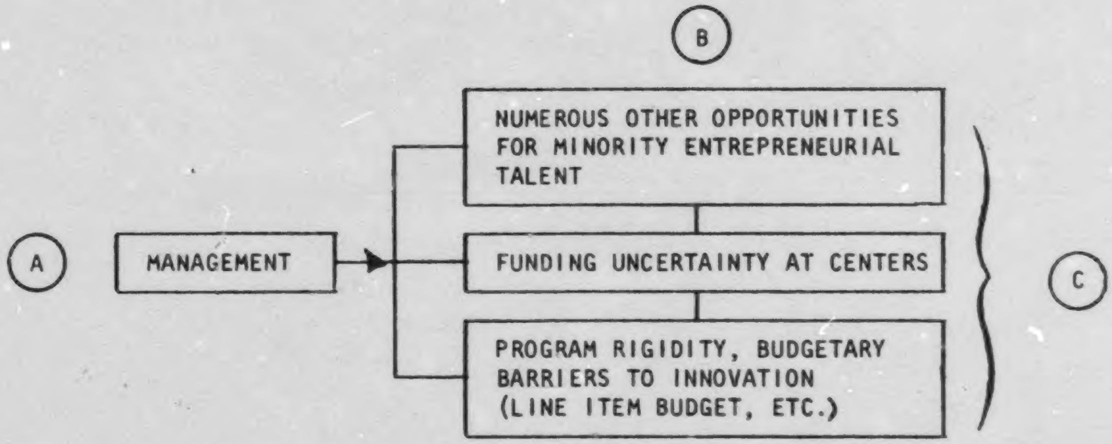
APPENDIX

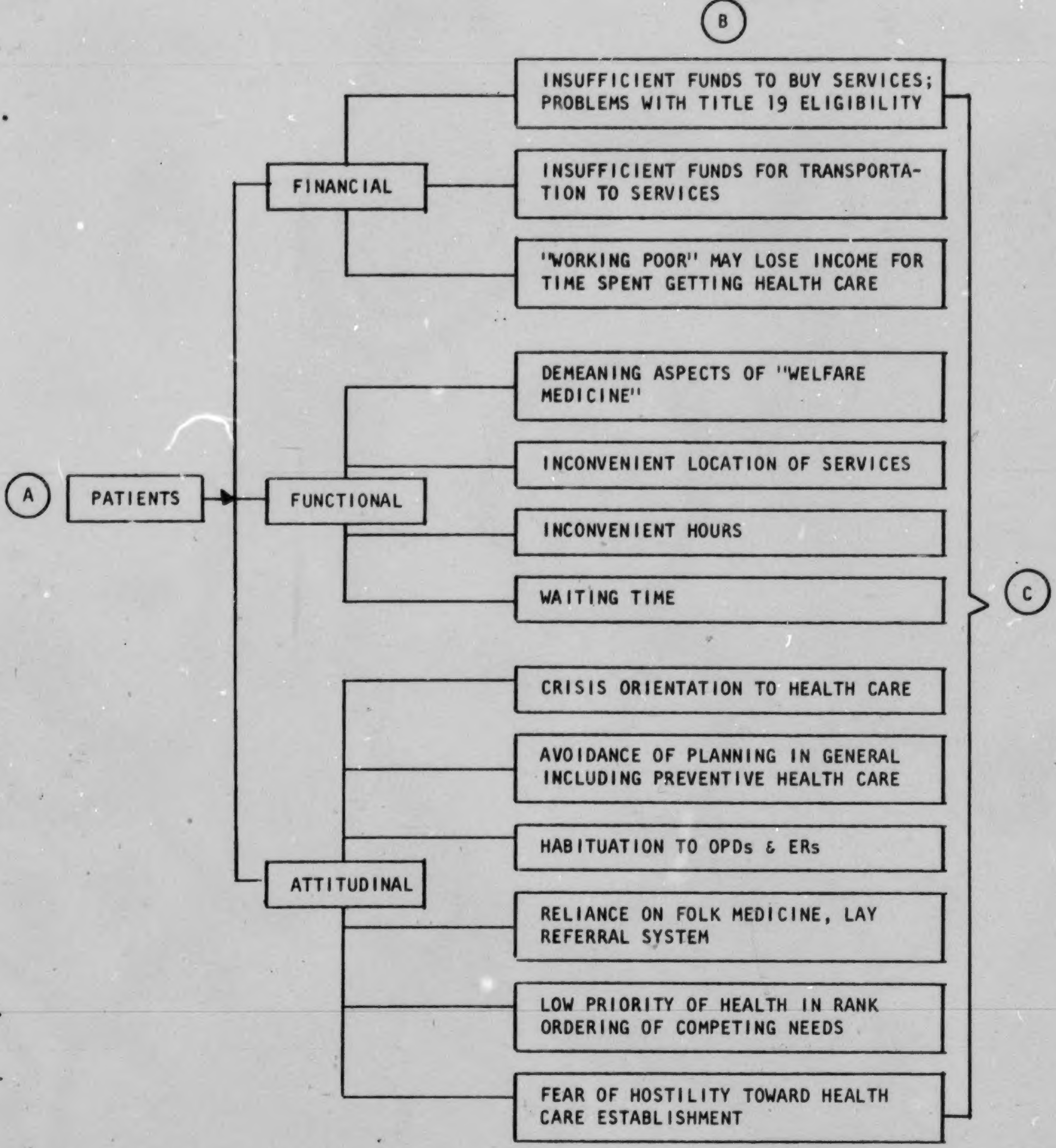
FLOW CHART


A
INPUTS
B
(BARRIERS)
C
COMMUNITY HEALTH CENTER
A
DOLLARS
PROVIDERS
MANAGEMENT
PATIENTS
B
BARRIERS
C
COMMUNITY HEALTH CENTER


B
COMPETING HEALTH NEEDS (E.G. RESEARCH, EDUCATION)
PHILOSOPHICAL QUALMS: SHOULD FEDERAL GOVERNMENT PROVIDE DIRECT HEALTH CARE
EQUITY PROBLEMS: WHO GETS A CENTER? WHY PROVIDE POVERTY GROUPS WITH HEALTH SERVICES OFTEN UNAVAILABLE TO MIDDLE CLASS (E.G. TRANSPORTATION, OUTREACH)
ATROPHY OF POLITICAL MUSCLE ELOQUENCE OF DETRACTORS
PLACE LESS EMPHASIS ON HEALTH CARE (6% REVENUE SHARING FUNDS FY 72 TO HEALTH)
FOUNDATIONS RELUCTANT TO FUND DIRECT PATIENT CARE
FEDERAL
STATE AND LOCAL
PRIVATE
A
DOLLARS
C


B
A
PROVIDERS
RELUCTANCE TO LIVE IN RURAL AREAS OR TO PRACTICE IN INNER CITIES
PREFERENCE FOR MIDDLE INCOME PATIENT POPULATIONS
LESS COMPETITIVE SALARIES, PREREQUISITES AT COMP. HEALTH PROJECTS
SUB-SPECIALIZATION
PROFESSIONAL PRECONCEPTIONS: LOW STATUS OF PREVENTIVE MEDICINE RELATIVE TO CURATIVE, CHRONIC ILLNESS RELATIVE TO ACUTE
APPARENTLY PRECARIOUS FINANCIAL POSITION OF MANY CENTERS, CENTERS' DEPENDENCE ON CONSTANTLY REDUCED FLOW OF FEDERAL DOLLARS, YEAR-TO-YEAR FUNDING UNCERTAINTIES
LACK OF HOSPITAL PRIVILEGES
C


B
A
MANAGEMENT
NUMEROUS OTHER OPPORTUNITIES FOR MINORITY ENTREPRENEURIAL TALENT
FUNDING UNCERTAINTY AT CENTERS
PROGRAM RIGIDITY, BUDGETARY BARRIERS TO INNOVATION (LINE ITEM BUDGET, ETC.)
C


B
INSUFFICIENT FUNDS TO BUY SERVICES; PROBLEMS WITH TITLE 19 ELIGIBILITY
FINANCIAL
INSUFFICIENT FUNDS FOR TRANSPORTATION TO SERVICES
"WORKING POOR" MAY LOSE INCOME FOR TIME SPENT GETTING HEALTH CARE
DEMEANING ASPECTS OF "WELFARE MEDICINE"
INCONVENIENT LOCATION OF SERVICES
A
PATIENTS
FUNCTIONAL
INCONVENIENT HOURS
WAITING TIME
C
CRISIS ORIENTATION TO HEALTH CARE
AVOIDANCE OF PLANNING IN GENERAL INCLUDING PREVENTIVE HEALTH CARE
HABITUATION TO OPDs & ERs
ATTITUDINAL
RELIANCE ON FOLK MEDICINE, LAY REFERRAL SYSTEM
LOW PRIORITY OF HEALTH IN RANK ORDERING OF COMPETING NEEDS
FEAR OF HOSTILITY TOWARD HEALTH CARE ESTABLISHMENT

CRIME

"Crime and Poverty"

by

Richard W. Richardson
with contributions by Katherine Roberts

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CRIME AND POVERTY

In the many attempts of the past decade to explain, to assess and to remedy the problem of poverty in the United States, disproportionately little attention has been paid to the complex relationship between poverty and mounting crime rates, despite the growing public consciousness each of these social problems has enjoyed throughout the period, and despite the apparent intimacy of the relationship between them. There is considerable evidence that crime -- at least of the types that seem to generate the greater amounts of public anxiety -- is heavily concentrated among the poor, is very probably a product direct or indirect, of poverty itself, and represents a serious and unmeasured additional burden of the poverty condition.

That crime is heavily concentrated among the poor in this country is to say, at the outset, that the poor are statistically by a wide margin the most frequent victims of crime and the most frequent offenders. For this reason alone, any re-examination of the condition of the poor and the programs addressed to their problems would be seriously remiss if it failed to address crime as one of the more serious, if less measurable ills, to which they are heir. A second reason lies in the possibility that there is a substantial payoff to shedding additional light on the poverty-crime nexus because of the dual pre-occupation of the public with both problems. This paper is an initial attempt to establish a framework for examining these problems as they bear on each other. It is necessarily tentative and abstract in character, although casual use will be made of some of the more significant empirical evidence available. Its ultimate purpose is to suggest an eclectic approach to poverty and crime, in the hope that the perspectives of different disciplines can be refined and perhaps reconciled; that some new avenues of research will emerge; and that some useful new approaches for public policy may eventually materialize.

1. The Victims of Crime

The Federal Bureau of Investigation publishes in its Uniform Crime Reports, a continuing statistical measure of the types of crime that presumably are of the greatest concern to the general public. The UCR is the sole authoritative source of data on such crimes, which include murder and nonnegligent manslaughter, rape, aggravated assault, robbery, burglary, larceny, and auto theft. The discussion that follows refers largely though not entirely to such crimes, even though we are aware that they represent only a small numerical proportion of the total crime committed in this country, and an even smaller proportion of total crime when measured by dollar volume (the data exclude most white-collar crime, such as embezzlement, price-fixing and other business practices; most organized crime, gambling; prostitution, etc.). The rate of occurrence of UCR crimes has risen dramatically -- by 138 percent in the decade, 1962-72, from 1191 to 2830 offenses per 100,000. During that decade, in other words, the risk of being a victim of one of those seven Index crimes has substantially more than doubled. The risk of being a victim of a nonviolent property crime (burglary, larceny, and auto theft) is much greater than that of a violent personal crime, the latter comprising only 14 percent of the volume of reported Index offenses.

The FBI figures are already alarming, but two national studies of victimization, one by Philip Ennis for the President's Commission on Law Enforcement and the Administration of Justice in 1967 and a very recent one by the Law Enforcement Assistance Administration in the five largest U.S. cities, suggest that actual crime rates may be approximately twice as great as those shown by the FBI. The FBI statistics, based on police records, understate the volume of crime, because for a number of reasons victims shirk from the involvement with the criminal justice system that is a consequence of reporting crime.

The FBI figures are misleading from another, and very important, perspective: the burden of victimization does not fall equally among the population. It falls unequally on a geographic basis -- especially as between urban and rural areas -- and it falls unequally between the poor and the nonpoor. For reasons to be explored below the net result of these phenomena is to place the burden of victimization disproportionately upon the poor.

The urban concentration of crime is perhaps more widely recognized. FBI figures show the rate of property crime and the rate of violent crime in the cities of 250,000 or more population to be approximately four and seven times greater respectively than in rural areas, and in addition, underreporting is probably much more prevalent in the cities. The suburban areas' crime rates lie between the urban and rural rates for property offenses and approach the lower rural rates for violent offenses. In only one Index crime, murder and nonnegligent manslaughter, is the rural rate greater than the suburban rate and this probably reflects the much higher incidence of murder in the predominantly rural South.

An equally impressive contrast in rates of crime is that of the poor and the nonpoor. Crime rates between two economic areas of the same city or SMSA can differ as markedly as they do between the urban and rural areas. A recent comparison of the robbery rate, for example, in a Central Harlem precinct and in an upper East Side precinct in New York showed the former rate to be more than seven times that of the latter. Again, the difference is probably understated.

A long series of so-called "ecological" studies, starting with Shaw and McKay in the 1930s, show that the crime concentration within urban areas is not a recent phenomenon.* Crime occurence was consistently greatest in the central city or outlying pockets where economic and physical conditions were most deteriorated, and decreased with distance from such areas and with improved economic conditions. This pattern held true regardless of which ethnic or racial group occupied the deteriorated area. Shaw and McKay further illustrated this point with their recent data on Chicago which showed that while most of the areas with the most rapidly increasing crime rate were black-dominated, so also were the majority of the neighborhoods with the most dramatically decreasing rates. The latter were older communities where time, rather than movement to another part of the city, had brought about increased economic and social stability.

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*These studies seek to locate and explore the concentration of crime by correlating various demographic and general variables of an area with its crime rates or with its rate of resident, known offenders. Since studies show that most offenders commit their crimes close to home, the offender-based studies also tell us something about the area of victimization.

The correlation between poverty and crime is confirmed in greater detail by the broad victimization studies of Ennis and LEAA, and also other more specialized surveys*. The rate of rape victimization is highest for lowest-income women. The majority of robberies and burglaries are against persons and personal residences, as opposed to commercial establishments, and among such personal crimes low-income individuals again experience the higher victimization rates. The LEAA data differs here with regard to burglaries, and does not seem to support the thesis of greater victimization among the poor. However, the LEAA survey, concentrating as it did only on the five largest cities, interviewed proportionately more blacks than did Ennis in his national survey, and an interesting, but explainable, contradiction shows up in their figures: burglary victimization decreases with increasing income for whites but increases with increasing income for blacks, reflecting the fact that middle-income blacks are confined by segregation to black areas which tend to be poorer and thus higher crime areas. The 1973 census report on the social and economic status of black Americans shows that in metropolitan areas the majority of blacks regardless of income live inside the poverty areas.*

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*Studies by Reiss; Crosby and Snyder; Fooner; Normandeau; and LEAA on Dayton and San Jose.

As for the other Index crimes, the incidence of aggravated assault shows no income pattern in the Ennis survey but is more frequent among lower-income groups in the LEAA and other studies. Larceny of $50 and over, consisting primarily of theft of auto parts and of bicycles, occurs more frequently to persons in the upper-income levels. Auto theft victimization by income does not demonstrate a strong pattern in the Ennis survey but increases with increasing income in the LEAA survey. The larceny and auto theft results are not unexpected since most of the cars and bicycles are to be found in the upper income neighborhoods. Homicides are not included in the victimization surveys for an obvious reason. It is known, however, that most homicide victims are in fact of the lower-income class.

Since the poor are the most frequent victims of serious crime, it is not surprising that the largest poverty group, the blacks, should also have a high victimization rate. With the exception only of larceny, the black rate of victimization varies from one and a half to four times as great as that of the whites, depending on the type of crime. Comparing figures on national homicide victimization by race and by population, an even more dramatic picture emerges: in 1972 there were 3.9 white victims per 100,000 white population and 36.6 black victims per 100,000 black population.

It is evidently the case, in sum, that a poor, black, urban area attracts the greatest incidence of crime. But the relationship between poverty and crime is even more intimate because that same area is also the home for the majority of the offenders themselves, a fact that follows directly from the tendency of criminals (of the UCR type) to operate relatively close to home. Why they in fact do so will be explored in a later section.

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*New York Times, July 24, 1974, p. 10.

II. The "Causes" of Crime

Explanations of crime are as old as crime itself, as is the case for any burdensome social phenomenon. But despite the long-standing interest in the subject, it is not possible even at this date to point to one complete and self-contained theory of crime that is logically consistent, inherently plausible, or empirically verifiable (much less verified). Sociology, psychiatry, criminology, genetics, and economics have at one or another time made important contributions to our understanding of crime, but there is no widely accepted theory in any of these literatures that is not critically -- even mortally -- deficient in some vital respect. Moreover, there is not nearly enough communication among these fields to produce an eclectic explanation that would coincide with the more salient facts. Failing adequate explanations of crime in systematic terms, those responsible for public policy have been forced to resort to haphazard experimentalism, at best, and to innate prejudice and habit, at worst. This has meant that despite the depth of recent public reaction to the dramatic rise in crime rates and the general realization that the criminal justice system in its present form 'does not work', few serious policy inroads into the problem have been made. Despite occasional experimentation, anti-crime techniques and policies remain essentially unchanged. The enforcement system has characteristically responded quantitatively with more manpower and more hardware but little new direction -- even though the evidence indicates that conventional additions to the enforcement system have had little noticeable deterrent effect. The court system is essentially as it was half a century ago: inefficient, erratic, and focused on processing criminals rather than meting out justice; and the correctional system continues to operate conventionally with little evidence that it either corrects or deters, with recidivism rates as high as ever.

Well before crime rates had mounted to the recent levels they have attained in the U.S., a number of writers had propounded explanations of crime and of the character of the criminal. But until relatively recently, criminal theory was largely the province of the sociologist and the criminologist, with occasional interventions by the clinical psychiatrist. Theories of crime were put forward employing many different causal phenomena, but the condition of poverty is a recurrent theme throughout; and frequently it is cited as an underlying source of other social and even clinical syndromes associated with crime. Perceptions of poverty as a direct or indirect cause of crime, indeed, date back to Aristotle and Virgil, among other early observers. For those writers, the link between poverty and property crime tended to be direct, rational, and universal: the poor lack the material goods available to the rich, and in extremities of want (such as starvation) may be driven to expropriate the property of others despite social injunctions against doing so. And for most purposes, this explanation of crime of property was sufficient unto the day, in view of the relatively minor incidence of property crime in traditional and early societies. To these could be added the even less frequent crimes of passion and violence, which were attributable in the eyes of the earlier writers, not to social but to individual deviance that might or might not be remediable.

The nexus between crime and poverty was elaborated considerably by Marx and his followers. The economic interpretation of history provided a natural setting for an explanation of crime, starting with the divorce of the worker from the means of production, the growth of the capitalist class structure and its alienating properties, and the environment to which the capitalist class structure gave rise: the capitalist mode of production, implying competition, private property, and individual profit, is inimical to and indeed in fundamental conflict with man's altruistic instincts. Capitalism is in its very nature an adversary process, which blunts compassion and erodes morality; it forces the substitution (presumably for some other rule of order) of a system of rewards and punishments to maintain, among other things, social discipline and low rates of crime. Moreover, a combination of historical circumstances and deliberate conspiracy has dictated that economic rewards are maldistributed in the population, thus forcing those who are unjustly deprived to acquire illegally the benefits denied them by the system, even though they incur the risk of punishment (invented and administered, it need hardly be added, by those who by historical accident are the property-owning controllers of the system). Thus, it is the worker's loss of economic status, of which the extreme is poverty, which in this view generates crime in an industrial society where there had in traditional societies been little or none. And it follows that the only remedy for crime would be the transformation of the entire system into a classless and egalitarian society, where there presumably will be no want, competition, or envy.

In more recent times, sociologists and criminologists have tried to develop theories of criminal behavior that are related to the general condition of poverty somewhat less directly than Marx and his predecessors. Poverty as it is to be found in the industrial society generates a deep and abiding frustration in the less advantaged, and this frustration finds its outlet in a variety of anti-social expressions, one of which is crime -- crime of violence as well as of property. This process has different labels, culture conflict, anomie, differential association, etc., depending on the emphasis of the sociologist, but the conflict between the environment of the poor and of the rich remains the basis for it.

It should be noted that the underlying condition of poverty to which even some earlier writers ascribed criminal motives and behavior is a relative, rather than an absolute concept. Absolute poverty has existed for centuries in Western as well as in traditional societies without producing the alarming rates of crime we now experience in the U.S. Even in sociological theory, the frustration and anomie that produces criminal behavior arises from a combination of economic deprivation and a perception that others in the society are better off, that there is an alternative to the poverty condition. This effect is very akin to the "demonstration effect" that economists have described in their analysis of the less-developed countries to explain in part the politically destabilizing effects of the onset of economic growth. Due to the introduction of modern communications and transport, the poor become aware, for the first time, of the material wealth and consumption standards of the privileged few, and develop ambitions for higher levels of living that must go unrealized for an intolerably long time, because of the slowness of the growth process and the unevenness of its spread. The emergence of these new conditions can be used to explain the rise of crime rates as well as political instability, which are in several respects related phenomena. In fact, crime rates appear to accelerate in virtually all traditional societies as they undergo rapid economic change. If this notion is valid, it is the perception of serious maldistribution of income which is a cause -- not necessarily the only or sufficient cause -- of high rates of crime.

The process of urbanization insures the existence of such a perception. Crime everywhere is an urban phenomenon and it is in urban areas that rich and poor tend to live in heterogeneous neighborhoods, or in homogeneous neighborhoods that are physically congruent, where the disadvantaged are so readily able to perceive the difference in the two conditions. In rural areas, both in industrial and in less-developed countries, the absence of this kind of physical proximity limits the perception of income differences, and may thus help to explain lower crime rates in such areas. This type of explanation, of course, leaves open a host of questions, prominent among which is the fact that among the urban poor, equally exposed to evidence of others' affluence, by no means all react in criminal ways. The vast majority either remain passive or react constructively to the challenge of economic betterment by seeking paths, amidst great obstacles, up through the socioeconomic structure. It is clear that the presence of relative poverty, then, is not a sufficient explanation of crime and high rates of crime, but it should not be rejected, at least for the present, as a necessary condition of crime which, when combined with other circumstances, may explain the differentials in crime rates among groups and within them. For these additional circumstances or conditions, we may have to turn to sociology or psychiatry.

Economists are once again attempting to sort out the complexities of crime by using the fundamental assumption of economic rationality that underlies all of modern economic thought. In this framework, the criminal is conceived as a maximizer of his economic welfare who weighs the expected utility of committing an offense against the utility he might otherwise derive by engaging in some alternative occupation. "Utility" is a concept that provides a common, but not strictly measurable, denominator against which comparisons of both benefits and costs can be made. The individual is assumed for present purposes to confront two classes of opportunity, one legitimate and the other criminal. He will choose that class of opportunity (and, similarly, among the alternatives within that class) which appears to afford him the highest "benefits", after allowing for the costs of each type of activity. Each expected return, in other words, is weighed against each expected cost, both returns and costs being subject to uncertainty and risk. The individual will commit an offense if the utility he expects to flow from that offense exceeds the expected utility from alternative opportunities.

The potential benefits from employment in general include money (or real) income as well as other, non-material rewards of the job, including the compatability of associates, the pleasantness of the surroundings, the social approval attaching to the occupation, and the like. As against such benefits of any job or activity, the individual weighs the costs to him of being so engaged. Such costs include the income available to him in other available (legal or illegal) occupations, the boredom, fatigue or other subjective attributes of the job itself, the discomfort and cost of commuting, etc. If the individual is contemplating an illegal occupation, he will add to these costs certain others peculiar to such activities, prominently including -- it is assumed -- the probabilities of apprehension, conviction, and punishment. In addition to the risk of arrest and punishment, criminal activity is distinguished from "gainful" occupations by a set of social, legal, and ethical codes, which apart from the risk of punishment are designed to deter individuals from illegal acts. The existence of such codes acts in varying degree upon the individual as a cost of committing an offense. Thus, the "willingness to commit crime" should be specified as a cost -- or as a constraint -- in the individual's decision to engage in criminal activity.

In the economic methodology, it does not matter whether the individual perception of the costs and benefits of alternative activities is "correct" or not. It only matters that such perceptions, however faulty, exist and are acted upon by the individual. All human action is subject to risk and uncertainty, and criminal behavior perhaps more so because of the risk of apprehension and punishment. The potential offender may overestimate the "take" from an illegal job and/or assign too low a probability to the risk of arrest, so that his original cost-benefit calculation goes seriously awry; and the office worker may, by the same token, overestimate his future income in accepting employment, or underestimate, for example, the pain-cost of commuting to work. But in all cases, behavior may be interpreted as "rational" rather than deviant or anomic so long as the occupational choice was preceded by an appraisal of alternatives in terms of expected costs and benefits. Thus for the economist at least, the "cause of crime" is not to be found in the literature of psychiatry or criminology but in the economic rationality of the individual.

III. The Costs of Crime

Opportunity Costs

Among the costs prominent in any occupational choice are the opportunity costs of that choice, defined as the highest income available from an alternative use of the individual's time and effort. The opportunity costs of the same occupation or activity therefore may appear quite different to different people, by virtue of differences in opportunities open to them. These differences, in turn, are determined by a host of factors including individual traits, economic and social class, accident and luck. In general, however, the opportunity cost of any job choice will vary directly with economic status: the higher that status, the higher the income from available alternative opportunities.

We can deduce from this that the probability of an individual choosing a criminal activity (or a career of crime) increases with the decline in his available alternatives, a proposition familiar from earlier poverty theories of crime. But this formulation goes somewhat further, since it is more general in permitting at least a partial explanation of the incidence of crime in other income groups. For it may happen more than occasionally in such groups that individuals come upon criminal opportunities yielding benefits in excess of even relatively high-income legitimate alternatives. In such instances, perhaps less frequent in upper- than in lower-income groups, rational maximizing behavior would dictate the criminal choice. For such groups, the cost side of the equation may be more conjectural: the probability of arrest is lower for higher socioeconomic strata,but the subjective costs of arrest and conviction may be higher, for reasons discussed below.

Opportunity-cost analysis for our purposes has a weakness because it can distinguish the phenomenon of unemployment from all other income conditions only in degree but not in other characteristics. But there is much evidence that the condition of unemployment has an impact upon the individual that is qualitatively different from even the low-income jobs. With respect to crime, perhaps the most compelling fact about unemployment is the absence of regular commitment of time and effort. In an organized industrial economy, there is reason to believe that the absence of a regular work commitment tends to be destabilizing and alienating, in addition to (or only partly because of) the financial anxiety that it produces. Countless investigations confirm that even with public unemployment relief programs fully operative, so that immediate financial anxiety is mitigated, the fact of unemployment produces deleterious effects upon the individual and the group which condition the willingness of the individual to undertake criminal activity. These effects may weaken the social constraints within which the individual makes his "economic" calculation of the costs and benefits of crime, increasing the willingness to commit offenses.

But what kind of unemployment may have these effects? We should distinguish short-run, cyclical unemployment from the long-run, chronic unemployment which has different origins; the two types are very different in their economic and social impact. Cyclical unemployment tends to be of very short duration: since the Second World War, the average period of unemployment traceable to the general business cycle lasted about four months. Of those unemployed because of business recession, the great majority can expect to return to the same or similar jobs when business conditions improve. In the interim, they maintain contact with the job market through a number of devices, ranging from Federal and state job agencies to personal and media contacts. During such cyclical transition periods, unemployment relief systems serve to ease the financial burden entailed by the loss of job and income. Under these circumstances, it is unlikely that groups possessed of a strong work ethic will, in substantial numbers, undertake immediate and drastic re-evaluations of their altered opportunity cost situations, overcoming in a brief period of unemployment the cultural, habitual, and other behavior constraints, including their "willingness to commit offenses". Thus, we should not expect to find -- nor do we -- that there is any obvious correlation between crime rates and the business cycle, and even studies of the long depression in the 1930s failed to show clear and consistent upward trends in crime rates.

The growing fraction of the population that is unemployed for non-cyclical causes bears only a superficial resemblance to the cyclically unemployed. These are the so-called "structural unemployed" who are not able to participate in the labor force with any continuity even at the heights of prosperity because of a wide variety of debilities, including physical handicap, inadequate skills and training, and racial bias. In sharp contrast to the cyclical unemployed, these individuals are characteristically only intermittently employed from the earliest labor-force ages. Typically they are urban poor whose educational, social, and economic opportunities are constricted by their class inheritance. They early become part of what the sociologists call juvenile subcultures, in which anomic and deviant attitudes overwhelm more conventional economic and social behavior; they exist in a milieu in which economic aspirations are severely limited.

It is for such groups that we might expect the cost of crime, in the opportunity-cost sense of foregone legitimate opportunities, to be lowest. For them, cyclical variations in business conditions are not likely to produce much difference in such costs, or in their willingness to commit crime: these characteristics have been formed from an early lifetime of neighborhood experience. Normandeau, in fact, found in his study of robbery in Philadelphia that of all general occupational categories of offenders, the largest single group, 50 percent, were unskilled laborers, as compared with 3.5 percent for unemployed whites and 18.1 percent for unemployed blacks. The unskilled laborer faces a continual uncertainty of employment whereas many in the unemployed category may be only temporarily out of work. The higher percentage of black offenders who are unemployed reflects their greater participation in the structural unemployed group. This same set of circumstances also helps to explain, as will be discussed below, the fact that among youth generally -- the age group with the highest crime rates -- the rates for poor youth are even higher.

Punishment and Deterrence

In addition to the opportunity costs weighed by the individual in making his career choice of criminal or legitimate activities, the criminal choice involves a special set of costs in the form of the risk of arrest and punishment inherent in the commission of an offense. Arrest and punishment have their own economic costs to be weighed in the cost-benefit equation, and like all other economic costs they are subjectively determined; they will vary from one individual to another, and from one group to another.

If an offense is committed, it is by no means certain that the offender will be apprehended: in 1972, only 21 percent of reported Index crimes in the U.S. were cleared by arrest. If an offender is apprehended, it is not certain he will be tried for that or any other offense (only 18 percent of the offenses resulted in persons actually charged). If an offender is tried, it is not certain he will be convicted (only 6 percent of the offenses resulted in convictions as charged or of a lesser charge.* If convicted, it is not certain he will actually serve a sentence, and if he serves a sentence it is not certain that he will serve one as severe as the law of that jurisdiction provides for that offense. In some rough, subjective way, the potential offender will take into account all these contingencies, assigning some probability to each possible outcome. It is evident that the product of all these probabilities yields a final probability of punishment for a given offense of considerably less than one. It is this modest probability that qualifies the expected costs of any punishment that the potential offender contemplates in making his decision. Thus, the two aspects of deterrent costs that must be weighed are the probability and the severity of punishment.

Future events are uncertain; and different individuals react to uncertainty quite differently. For some, the possibility of punishment may itself serve as a serious deterrent to crime; for these "risk avoiders", the very uncertainty of the future may be more costly than any other deterrent. On the other hand, for the group that are referred to as "risk preferrers", the uncertainty of the outcome may serve more as a utility than as a cost. It may thus turn out that some individuals may choose a life of crime even if the income expectation is lower than legitimate alternatives, because they derive some special satisfactions out of risk itself.

Different individuals and groups will perceive differently the risk of being arrested for an offense, quite apart from their receptivity to the fact of risk itself. Perception of the risk of arrest depends, among other things, upon the experience both of the individual and his peer group. It can easily be inferred from the many studies investigating crime rates by income area or group that the incidence of arrest varies inversely with economic status. In the first instance, this is simply attributable to the higher incidence of the type of crime which attracts police attention among lower-income groups. The police therefore regard lower-income and ethnic minorities as the most fertile field to locate suspects for such crimes as robbery and rape. Embezzlement, which does not appear to excercise the public as much as street violence, would therefore presumably show a better cost-benefit calculation than burglary, other things being equal. But other things are not equal; the feasible crime horizon of the poor rarely includes embezzlement. The opportunity cost of any particular crime, as noted above, tends to increase with increasing economic status, not only because the horizon of legitimate opportunities increases as one ascends the economic ladder but because the horizon of criminal opportunities widens as well. This is illustrated by the fact that as women have increased their numbers in the office labor force, their participation in white-collar crime has increased by as much as 180 percent.*

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*While the UCR data used here are not recorded from the whole population, it can be taken as a rough estimate of the national picture.

Another reason why low-income persons may have a higher rate of arrest (and conviction) is that a law enforcement official is more likely to trust in the corrective influence of a middle-or upper-class home environment. He is also likely to perceive an arrest record as having a greater impact on these groups and would therefore more often avoid making the arrest official.

It is worth noting here the apparent paradox of the facts that the incidence of arrest is comparatively so high in low-income groups, and the frequent complaint by ghetto residents, that they are acutely underprotected by the police. Particularly in the black ghettos, the supply of police protection is smaller when measured on a per capita basis and lower still on a crime rate basis than in neighboring higher-income communities. The recent comparison between a Central Harlem and an East Side police precinct showed for example that the number of police officers assigned to the Harlem precinct was only about one-third when measured in terms of the number of reported robberies, compared to the East Side precinct. This uneven distribution of protection may be caused by a number of factors, including the higher average population density of the ghetto neighborhoods, the higher crime rate itself, and political pressures from the higher-income communities. There is also the tendency of victims in the lower-income neighborhoods to underreport the actual occurrence of crimes for reasons which in fact include the lower supply of police protection: many victims feel that nothing can be done by the police in any event, or -- perhaps because of a declining "marginal disutility" of crime as rates rise -- that the crime is not "important" enough to warrant summoning the police.

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*New York Times, June 19, 1974, p. 50.

While the poor may perceive their likelihood of arrest as being higher than for other persons the deterrent impact of such a perception is lessened by, among other things, the decreasing ratio of clearances by arrest to crimes reported and the decreasing prospect of receiving a severe sentence, or a sentence at all, if convicted. Plea bargaining, which may be viewed as a market-clearing device where the "supply of offenses" is in excess of the justice system's "demand" for them, has tended in this direction, as have a number of civil liberties decisions from the courts.

The importance of these considerations flows from the agreement among students of crime prevention that the probability of punishment outweighs its actual severity as a deterrent force.

But the severity of punishment is regarded by many as a critical element in the deterrence equation. In contemplating possible arrest and punishment, the potential offender must allow roughly for both direct and indirect costs. One indirect cost may be the income loss incurred by imprisonment, relieved only by what nominal earnings may accrue to him through prison labor. Similarly there may be a significant future earnings loss for the ex-convict simply as a consequence of conviction. Employment opportunities open to former convicts are few and far between, and a major aspect of the problem of "rehabilitation" centers around this fact. It should be added that to some extent, the fact of an arrest record, regardless of the outcome of the case, results in restriction of employment opportunities.

The comparative magnitude of the earnings loss both during and after a prison sentence depends, of course, on the usual employment opportunities open to the offender had he chosen differently (or, at least, not been caught). The negative income and employment effects of prison punishment, as viewed by the prospective offender, are smaller the lower was the pre-arrest income and employment horizon. In the extreme case, some highly disadvantaged groups may consider themselves even at the earliest labor-force ages as ineligible for virtually any legitimate opportunities, a judgment they may derive from neighborhood lore and observation. They are thus in effect assessing the income cost of prison as negligible or zero, since their normally poor employment opportunities are not materially worsened by their encounters with the law. Future earnings may even be improved by the prison experience; there is abundant literature attesting to the educational value of prisons with respect to acquiring new skills and tools of the criminal trades.

If these considerations are valid, we must modify the usual inference from economic analysis on the deterrent value of punishment. Punishment is a cost and therefore will serve as a deterrent in a cost-benefit calculation of alternative opportunities. But the lower the income cost of prison to the individual, the less will be its deterrent influence on the crime option. Both the probability and the length of the prison term will be less significant to the low-income individual than to the high; the "marginal income cost" of additional time in prison is lower, the lower the alternative income and employment opportunities that are lost by virtue of incarceration. Thus, we should on these grounds treat with caution any policy that lengthens prison terms on the grounds of improved deterrence, so long as the predominant clientele of the prisons is recruited from the poverty group.

The direct costs of apprehension and punishment are monetary and psychic. Apprehension and indictment carry with them substantial legal costs, and psychic costs associated with reputational damage, social and familial disruptions, and loss of citizenship privileges. To some extent, these losses also are incurred simply by the fact of involvement with the criminal justice system, regardless of the ultimate disposition of the case; they are of course much increased in the event of conviction and punishment. In general, direct monetary costs are higher for upper-income groups, but differences among groups with respect to other direct costs are at best conjectural. Loss of freedom, for example, probably falls with equal impact upon rich and poor; at least, we have no reason to believe otherwise. Thus, it is primarily the differences in indirect "income cost" that suggest that low-income groups will be less deterred by the prospect of apprehension and punishment by imprisonment than higher-income groups.

The "Willingness to Commit an Offense"

Thus far, economic analysis tends to support the view that economic crimes are likely to be committed with greatest frequency by persons of the lower-income groups. One may object, however, that economic theory leaves much unanswered. It is evident, for example, that within any particular income group, there are some who opt for criminal activities, and some who do not. Within any income class, only a minor fraction choose crime, and of these a substantial proportion may engage in crime only part of their working time. If this is true, then economic theory, like other types of theory earlier mentioned, by itself fails to provide a complete explanation of crime, despite the disarming simplicity of its analytic tools.

Economic theory is formally protected against this criticism by specifying behavioral parameters within which the theory has explanatory value, but beyond which it does not. One such parameter is expressed as the earlier-cited "willingness to commit an offense". Such willingness is of course a subjective and variable attribute, and thus provides a catch-all explanation for differences in individual criminality that cannot readily be explained by economic factors: if criminality varies among individuals or groups in identical economic circumstances, we are forced back on differences in the "willingness to commit an offense" as the explanation. Such differences, it should be acknowledged, must ultimately be traceable to social, cultural, and clinical causes. But this limitation of economic theory applies to the differences in behavior among individuals and does not reduce its effectiveness in explaining many of the differences in the incidence of criminal behavior between whole groups of the population. Even there, however, the subject matter is so complex that more than one theory or type of theory may be required to explain or predict the behavior of different aspects of the same complex subject. No one approach may be sufficient; several may be necessary and sufficient.

IV. Theory and Facts: A Casual Comparison

Against the foregoing analysis, we can now sketch in some of the more salient statistical characteristics of what we know about criminal offenders in the U.S. to test, if only casually, how well the analysis explains, and is consistent with, the known facts.

Many studies have detailed, with varying degrees of success, the statistical pitfalls involved in present techniques of enumerating and classifying criminal activity and offenders. These pitfalls include, prominently, the nature, qualitative unevenness, political sensitivity, definitional fuzziness, and incompleteness of the reporting network that makes up the FBI's Uniform Crime Reports, the only recognized data source on crime. There are, moreover, the social, ethnic, and other peculiarities that help to determine the very definition of "crime" and, therefore, the perception of who is "criminal", which varies among states, cities, and other jurisdictions. There are, to illustrate the point, differences in written law (e.g., rape from state to state); in severity and duration of penalities; in zealousness of enforcement; and in strength of public reaction to particular crimes.

The primary known facts of crime in the U.S., which emerge despite the myriad qualifications, are these: "Index" crime -- i.e., major crime of property and violence as recorded by the FBI -- is predominantly a phenomenon of the poor, the urban, the male, the young, and the black.

Crime as an Urban Phenomenon

It has already been noted that the urban areas of this country are the hosts for the vast bulk of property and violent crime. This is just as we should expect from economic analysis. If rational choice underlies the commission of an offense, then as we have seen, the presence of job opportunities, as well as the expected income from them, represents an important factor in that decision. In general, the failure of job opportunity in the U.S. is an urban phenomenon. Urban income on a per capita basis is higher than rural but its distribution is very different. Large pockets of the structural unemployed, as earlier discussed, face throughout their working years very limited, frequently nonexistent job opportunities at any wage. In rural areas, typically, job opportunities are more evenly spread throughout the rural population; partly, of course, this may reflect underemployment. But even underemployment presents itself as an opportunity cost, albeit a relatively low one, and such opportunity costs of crime may thus be higher in rural areas than they are in impoverished urban areas.

At least equally important, moreover, the cost of criminal activity in rural areas is probably substantially higher per dollar of return than it is in urban areas, for at least two reasons. People and property are more widely spaced in rural areas; lower population density implies that the criminal must be more mobile to earn the same reward as his urban counterpart, and mobility has important associated costs. Various studies have concluded that most crime is committed within a short radius of the offender's home, presumably because the offender's familiarity with his neighborhood and the proximity of his home as a refuge offer him a higher degree of safety. Thus, the urban offender can earn more per unit of direct cost than can his rural colleague. In the second place, rural police deterrence is very probably more effective than that in urban areas. Sheer density of urban population is likely to provide more avenues of anonymity and escape, at least within present feasible limits of law enforcement expenditure. Moreover, the sheer volume of demand placed upon the police of the larger urban communities itself acts to reduce the deterrent cost of urban crime. New York City offenders, as a dramatic example, cannot help but learn through the grapevine of the reported informal decision of the New York Police Department, taken as a means of husbanding police resources, made scarce either (or both) by scarcity of budget funds or inefficiency, to ignore reports of household burglary under $500. Similarly, crowded courts and correctional facilities reduce the probability of punishment even if apprehended. These latter considerations suggest the presence in the criminal justice system of an "explosive disequilibrium": the greater the crime burden, the more strained are the resources of the criminal justice system; but the more strained is the latter, the lower will be its deterrent value against crime, and the more crime there will be. It is not surprising, from these considerations, that urban and rural crime rates are so asymmetric

Crime as a Male Phenomenon

Male offenders have throughout modern times dominated the statistics of Index crimes in the U.S., representing 82 percent of the arrests in 1972. This has been explained generally in terms of two sex characteristics, one biological and the other cultural. The biological characteristic, of course, is the sheer physical strength and/or dexterity presumably required for the criminal trades of the Index type. The second reason is best explained in obverse terms of low female crime rates and is thought to be lack of opportunity. Women have traditionally been confined by our culture to household, child-bearing, and other non-market activities which minimize their contact with and interest in criminal opportunity.

Differences of physical prowess may or may not be valid in explaining sex differences in crime rates, but differences in physical access to criminal opportunities does not fully explain the problem, at least with respect to Index crimes. If women have had low participation rates in the office and factory labor force, they are, it is true, less likely to have comparable occupational crime rates. But they have equal access from the home to Index crimes -- which occur predominantly, as was mentioned within a relatively short radius of the offender's home.

Low labor-force participation may nevertheless provide the explanation when differently framed. Females as homemakers, mothers, and wives seek to maximize different values from factory workers and clerks, and thus material benefits would enter less frequently into their cost-benefit calculus. When females begin to enter the labor force, they begin to maximize conventional market rewards, and the implication of this is that they undertake the familiar costs-benefit calculation of both legitimate and illegal opportunities. We would thus expect rising female crime rates as their labor-force participation increases, and we should similarly expect that crime rates will be inversely related to income and employment opportunities.

Available data bear out these expections. In recent years the UCR crime rates for females have been rising pari passu with their increasing labor-force participation. In 1954, females represented 2 percent, 4 percent, 2 percent, and 13 percent of total arrests for burglary, robbery, auto theft, and larceny; by 1972, female arrests for these same crimes had risen to 5.2 percent, 6.5 percent, 5.7 percent, and 29.7 percent respectively of the total. Over roughly this same period, female labor-force participation as a percent of female population rose from 31.4 to 43.6 percent, suggesting a possible relationship between the two phenomena. It is of course not possible without further analysis to determine the extent to which female criminality is caused by rising labor-force participation, or by other sociocultural and economic factors instead or perhaps in addition -- such as the "women's lib" movement of the past few years.

Crime as a Youthful Phenomenon

Most crime in the U.S. is committed by persons under 25 years of age. This is especially true of the property crimes, but the young are also disproportionately represented in crimes of violence. In general, the age group of highest criminal activity (as measured by rate of arrest) is 15-18, after which, the rate declines steadily year by year. It is also known, although with less documentation, that the highest proportion of arrests among youth is of those in the lower-economic groups. Economic theory can contribute to the explanation of this selective phenomenon.

Employment opportunity and job earnings are both lowest among youth, for two reasons. The first is that age and experiential factors are central determinants of both job opoortunities and the average earnings level of the labor force. The second is that a significant proportion of youth in the

15-18 year age group are not in the labor force at all as they acquire secondary education. For youth, whether in the labor force or not, the opportunity costs of crime are low by comparison with older, higher-earning age groups. The opportunity cost of secondary school in market terms is relatively modest at this stage. It may consist of the generally low earnings available to an untrained youth if he should drop out of school, or the even smaller after-school income from part-time jobs. But for youth in the poverty group, the family demand for additional income is strong. We should therefore expect that the cost-benefit calculation at this age points more affirmatively towards criminal acts than it does at a later age. But as the age group approaches 18 and older, the calculus shifts. The opportunity cost becomes increasingly significant for those who enter the labor force directly, acquiring non-temporary jobs or apprenticeships that open employment and earnings horizons for the first time. As legitimate opportunities and earnings rise, we should expect criminal activity to decline, since earnings opportunities in illegal activity do not, in the nature of the case, rise specifically at the completion of secondary education with anything like comparable rapidity.

A certain proportion of youth pass the age of 18 and undertake higher education rather than entering the labor force. For these youth as well, the opportunity cost of crime begins to rise but in a somewhat modified sense. For them, the horizon of legitimate opportunities begins to become discernible, not through actual exploration of the market but through expectations formed by communication with peers and other forms of indirect exposure to future earnings potentials. It is clear that because earnings in this case are only prospective rather than actual, they are in effect subject to some rate of discount in the individual cost-benefit calculation. Offsetting this, however, is the higher average lifetime earnings that those with advanced education can on the average expect from legitimate occupations. Whether or not these factors balance each other out is a matter of conjecture. The data are consistent with the view that the difference in expected earnings may outweigh the discount rate, because while crime rates decline as the cohort from 15 to 18 ages, they decline even more dramatically during the years of higher education. Prison statistics which admittedly are biased against the worst offenders, show that only 1 percent of those in prison and jails have completed four or more years of college as compared with 12 percent in the general population.

This proposition explains and is in turn confirmed by the unmistakable difference in crime rates between different income groups of the same age. All serious studies of delinquency conclude that, whatever other factors may be involved -- and there are several, including family status, mobility, and the like -- income and employment differences among youth groups are central explanatory variables. The lower the level of education, skills, training, social connection and, thus, economic opportunity, the less costly would we expect to be the criminal choice. These factors, whether economic or non-economic in character, are in general directly associated with family income. Youth in the lower-economic groups have a low probability of acquiring higher education, are the most frequent drop-outs from the lower schools, and also by all accounts experience -- especially if they are black -- serious difficulties in gaining union membership and trade apprenticeships. Such youth inevitably have much more limited occupational horizons than their middle-class counterparts. As young adolescents mature in low-income neighborhoods, especially of urban areas, where they are in fact concentrated, they are unlikely to entertain very lofty ambitions for themselves in legitimate avenues of opportunity, except through uncommon vision and individualism; among the peer groups of such adolescents, case studies of the "American dream" are not readily at hand to influence career choice in benign directions.

Crime as a Black Phenomenon

If American crime of the FBI Index variety is urban, youthful, and male, it is also black. The contrast of black and white is at its height among urban youth, but the net statistical picture in recent years has been of black Index crime rates ranging, for the country as a whole in 1967, from four times that of whites for nonviolent property crimes to fourteen times that of whites for homicide and robbery.* Blacks in 1970 were approximately 11 percent of the population but accounted for 36.4 percent of total arrests for Index crimes.

If there is reason to question the validity and accuracy of crime data in general, there is even graver doubt with regard to the statistics on blacks. On the one hand, local police practices and attitudes, bail bond procedures, and courtroom procedures all may harbor selective biases born of experience, prejudice, or both, which may inflate the ratio of black arrests and convictions to offenses. On the other hand, there exist, as previously noted, interdependent tendencies on the part of especially the black, urban poor and of the police to accept as "normal" and inevitable, rates of crime which elsewhere would be viewed as intolerable. Beyond this, there is much controversy and inconsistency in the classification of crime data by race. It is not possible to determine, from such opposing considerations, what the net effect is upon the validity of the data. But for present purposes there seems no reason to doubt that despite certain sizeable statistical error the rate of Index crime committed by blacks substantially exceeds the national average.

Much of what has been said above about the economic status and opportunity of the young, especially the black young, obviously is relevant to an economic explanation of black crime rates. The salient economic attribute of the black group in the U.S. is its high proportionate representation at the lower end of the income distribution. From the facts of both absolute and relative income, it can be easily inferred that blacks in general have, from youth onwards, very low opportunity costs of crime. The absolute incidence of chronic unemployment among blacks, higher than for any other racial or ethnic group, reinforces the effects of low average income among employed blacks. At the same time, as suggested earlier, a number of other economic forces work in the same direction to reinforce crime incentives. Among them is the relatively low deterrent value of potential apprehension and punishment -- partly because the opportunity cost of incarceration is relatively low for blacks, partly because the impact of conviction and imprisonment upon lifetime earnings of blacks is, for the same reason, lower than for groups with higher average lifetime income and employment prospects.

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*Wolfgang and Cohen, p. 32.

We have not been able to examine available data in enough detail to determine whether and to what extent black crime rate differentials are explained by income and employment opportunity differentials, and whether and to what extent by other factors. Surprisingly little work has been done on such questions, perhaps reflecting the poor quality of the data. But from a suggestive study by Edward Green of race and crime in an industrial Michigan city, some support can de adduced for the hypothesis that racial characteristics are swamped, as explanatory factors, by economic characteristics prominently including income and employment opportunities. This result is in marked contrast to an earlier study by Earl Moses, based on a study of two pairs of contiguous white and black Baltimore neighborhoods, which attributed higher black crime rates to "racial" circumstances -- such as discrimination. But serious flaws exist in the sampling procedure used by Moses, which overlooked a number of salient differences between the white and black neighborhoods that were not properly controlled -- including occupational and income differences (whites predominated as foremen, blacks as laborers); equally importantly, unemployment was not standardized, and there is every reason to believe that it was substantially higher among blacks during the survey period convered. In Green's own study, there appear also to be a number of open questions regarding the control of some variables, including migration and transplanted cultural patterns; but his study is sufficiently well-structured to warrant further testing, especially of the interdependence, so difficult to differentiate empirically, between race and socioeconomic status. It is, in any event, a reasonable, if tentative, conclusion from both the foregoing analysis and from the sketchy empirical work thus far available that the operative characteristic of race with respect to crime is employment and income, rather than race itself.

V. Conclusions

A re-evaluation of Federal or other programs to mitigate poverty necessarily must start by weighing the presumptive benefits of proposed or existing programs against the costs of such programs. Difficult as this procedure may be, it is made even more uncertain by a generalized inability even to develop a working consensus on what the conditions of poverty are that deserve alleviation. The high incidence of criminal activity within poor communities throughout the urban U.S. has received relatively little attention in the priorities of policy-makers, not necessarily without reason. The capacity of crime, especially crimes of violence, to generate anxiety throughout the entire community tends to blunt public awareness of the degree to which such crime is actually concentrated among the poor. Moreover, our dim understanding of the origins and causes of crime has not militated in the direction of the type of socioeconomic remedies for it which the anti-poverty program represents. We have, after all, an elaborate criminal justice system expressly engineered to deal with crime of any type at any socioeconomic level, and any suggestion that the syndrome can or must be corrected by means outside that system must understandably be viewed as radical.

Apart from its highly focused impact on the poverty group, it is also increasingly clear that the crime rate does not respond to conventional remedies available within the criminal justice system. Rates of recidivism appear to be rising, and the actual number of offenders is growing at a faster rate than the population as a whole. This is particularly discouraging when viewed from the vantage point of the criminal justice system, because in recent years public expenditures for that system have increased substantially -- to a point where total outlays in Fiscal year 1972 reached $12 billion, well over 1 percent of that year's GNP. Police forces have been expanded in virtually all urban areas; court processes and procedures are beginning to undergo revision, although only selectively; and there is considerable discussion and some early experimentation in the corrections phase, with different approaches to the nature and purposes of "correction" itself: probation is increasingly widely used, and in isolated instances efforts are underway to bridge the gulf between the correctional process and the community to which the individual must return upon completion of sentence.

But thus far there are few grounds for optimism that the criminal justice system by itself, no matter how expanded and modernized, will provide any enduring solution to rising crime rates, if only because the system is founded on a philosophic principle which seems increasingly inoperative in a modern industrial society: the criminal is a deviant phenomenon for whom punishment, by incarceration or otherwise, will, if properly applied in each instance, prove to be a learning experience that is bound to reduce the criminal proclivity. If that system fails, therefore, it can only be due to either a relaxation of correctional standards of punishment or to expenditure levels that do not keep pace with the growth of the crime problem.

Economic analysis of the crime problem suggests, at least at first glance, that this conventional wisdom may be less fruitful than was earlier thought. If, as suggested in the foregoing discussion, crime is the product of a rational calculation of economic alternatives rather than of "deviant" behavior, then the remedy for crime must be sought in the economic environment that so circumscribes economic opportunity. It is true that the same rational calculation of alternative costs and benefits implies that the rate of crime could be lowered by increasing the probability and/or the severity of deterrence; if the cost of committing an offense is raised in this way, we might expect the potential offender to be deflected from his course. There is no reason to question that punishment acts as a deterrent against crime in general, but one may reasonably be skeptical about the strength of this effect in actual fact. We have suggested above that there are a number of *a priori* considerations that suggest an inverse relationship between the preventive or deterrent effectiveness of imprisonment and the level of income and economic opportunity; and if Index crime is preponderantly an activity of the poor, the returns -- in the form of reduced recidivism and general deterrence -- to progressively more severe punitive policies may be quite low.

The other side of the economic equation, which involves raising the opportunity costs of criminal activity, may be more promising. The poverty program at its inception foresaw large social dividends from extensive manpower development, job training and educational improvement for the poor. All these programs were directed at an ultimate goal of expanding employment opportunities and incomes of the poverty group. The cost-benefit analysis of such programs would be markedly improved if the linkage between employment, income, and crime is as close as we may have reason to believe -- partly because reduced crime rates are so directly equatable with improved social welfare for the poor, and partly because that improvement extends so broadly into the non-poor community as well. At the same time, the analysis suggests that the relationship between anti-poverty programs and the criminal justice system should be much closer than it is. We have thus far learned relatively little about creation of employment opportunity; but we have learned, if anything, even less about rehabilitation of offenders. It seems clear that the criminal justice system must undergo wholesale re-examination of the premises underlying its approach to corrections, as many other countries are presently doing. When it does so, it may well conclude that job opportunity is a more promising approach to rehabilitation than confinement for the great bulk of the offender population, an approach which at the same time ties very directly into the objectives of the poverty program.

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This bibliography includes the studies which we have read and those which we have read about. It is intended to supply the source background of this paper, but even further, to supply students of the poverty-crime subject with a broad base of suggested research from which to begin their own studies.

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ENERGY

"The Effects of the Rising Costs of Energy on the Poor"

by

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THE EFFECTS OF THE RISING COSTS OF ENERGY ON THE POOR

1. INTRODUCTION

The recent sharp increases in the prices of all goods and services--and primarily of food, energy and fuels--has led to some discussion about forming new programs or extending existing ones to relieve the increased burden on the poor. This report will estimate the quantitative increased outlay of the poor as a result of the latest higher energy and fuel costs by examining their fuel consumption patterns and comparing the prices paid before and after the recent Arab oil embargo, and will discuss some mechanisms which may be instituted to provide some measure of relief. Further, it will present some ideas why the impact, obviously detrimental to the poor's welfare in the short run, may be beneficial to them for the long term.

Social awareness extended to energy in a serious way only recently. About 1970 or 1971, it began to be recognized that the cost for fulfilling the large and growing demand for energy and energy fuels had to include the diseconomies due to environmental degradation associated with energy production and use. Conformance to the new sets of ground rules tended to restrict production, and since demand was strongly increasing, prices threatened to rise in classical economic fashion. The situation was highlighted by some accidental "blackouts" and deliberate "brownouts" as voltage cutbacks became necessary to meet electricity demands in some parts of the country. Scenarios were fashioned (and still are) with regard to the impact on the public of possible energy and fuel shortages.

Emerging from these discussions was the movement toward the recognition of an "energy ethic"(27,28) which, in part, suggested that some minimum of energy fuels be subject to the right of individuals to purchase at reasonable cost, on demand. Because of a built-in dependency on fuels and electricity to maintain health and welfare, an individual had the right to some measure of house heating and cooking fuel, electricity and gasoline--especially if an automobile was to be used to get to work. In short, fuel and energy required for basic necessities were not to be regarded simply as a commodity, even though they were not totally free of charge. This "ethic" is like that established for food; that every American* has the right to some established minimum of calorie and protein, and food stamps and similar programs are (or should be) extended to anyone who cannot afford to purchase this minimum on the open market.

The Arab oil embargo tested the fragility of institutional systems that deliver petroleum-derived energy and power to American consumers. As pointed out above, while there were other forces already at work raising energy prices, the effect of the embargo is principally responsible for the increased concern for the poor regarding higher energy costs. The government maneuvering to ease the strain and the final decisions to cope with a new set of international ground rules with respect to petroleum are not the subject of this paper. The relevant observation is that, now, prices of refined products from petroleum have stabilized, for the short term at least, at plateaus significantly higher than those that existed six months ago. Rising oil prices have increased the cost of electricity produced from oil products. The prices of alternative fuels that can substitute for oil products in some way are being drawn upward by demand pressures brought on them.

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*This feeling is extending to the world community: that developed economies should make up the food deficits of the underdeveloped ones.

Unfortunately, the criteria which must serve as the basis for this research are far from clear-cut. What first must be determined is who shall be the beneficiaries of any consideration, or how shall "the poor" be defined? In the literature which has looked into the relationship between some fuel and energy consumption by "the poor", there is no real consensus. Some refer to the lowest-or two lowest-income quintile groups. Others establish reasonable, yet arbitrary, income levels for various family sizes as the demarcation line between poor and non-poor. These approaches differ from established Department of Commerce criteria for families and individuals below the poverty level (Tables 1 and 2) and are usually more liberal.*

The research is further complicated by the fact that not all people use the same type or same quantity of energy to perform the same functions. Costs for alternative energy fuels on an equivalent heat-content basis are different, and costs for the same type fuel vary in different parts of the country. Efficiencies of end-use mechanisms are not equal. Because of all of the above, exact quantitative results are hard to calculate, and policies to be applied to individual families or persons may be difficult to formulate and implement.

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*In 1972, there were 9,048,000 families and 10,501,000 unrelated individuals with incomes below $5,000; (2) for those below the poverty line, 5,075,000 families, 4,883,000 unrelated individuals.

TABLE 1

WEIGHTED AVERAGE THRESHOLDS AT THE POVERTY LEVEL IN 1972, BY SIZE OF FAMILY AND SEX OF HEAD, BY FARM, NON-FARM INCOME

(DOLLARS)

NUMBER OF FAMILY MEMBERS	TOTAL	NON-FARM			FARM		
		TOTAL	MALE HEAD	FEMALE HEAD	TOTAL	MALE HEAD	FEMALE HEAD
1 MEMBER	2,093	2,099	2,194	2,045	1,790	1,834	1,725
UNDER 65 YEARS	2,154	2,160	2,252	2,083	1,872	1,915	1,771
65 YEARS & OVER	1,996	2,005	2,023	1,998	1,709	1,721	1,697
2 MEMBERS	2,697	2,719	2,732	2,647	2,296	2,301	2,203
HEAD UNDER 65 YEARS	2,785	2,805	2,822	2,708	2,388	2,396	2,264
HEAD 65 YEARS & OVER	2,503	2,527	2,530	2,512	2,147	2,149	2,123
3 MEMBERS	3,315	3,336	3,351	3,229	2,830	2,835	2,733
4 MEMBERS	4,246	4,271	4,273	4,250	3,645	3,648	3,604
5 MEMBERS	5,004	5,038	5,041	4,994	4,300	4,302	4,291
6 MEMBERS	5,615	5,657	5,662	5,610	4,842	4,844	4,798
7 OR MORE MEMBERS	6,885	6,961	6,978	6,791	5,913	5,916	5,852

Derived from Table L, Reference 16 and Table A-1, Reference 17. In 1972, the average threshold for a non-farm family of four persons was $4275 as contrasted to the $4271 shown above.

TABLE 2

STATISTICS REGARDING FAMILIES AND UNRELATED INDIVIDUALS BELOW 1972 POVERTY INCOME LEVEL
NUMBERS IN THOUSANDS

	PEOPLE	FAMILIES			UNRELATED INDIVIDUALS	
		ALL	MALE HEAD	FEMALE HEAD	MALE	FEMALE
TOTAL	24,460	5,075	2,917	2,158	1,410	3,473
HEAD 65 YEARS & OVER		878	685	193	378	1,917
2 PERSONS		1,803	1,131	671		
HEAD 65 YEARS & OVER		681	556	125		
3 PERSONS		867	391	476		
4 PERSONS		793	399	394		
5 PERSONS		547	312	236		
6 PERSONS		456	272	183		
7 PERSONS OR MORE		607	411	197		
NO EARNERS		1,868	802	1,066		
1 EARNER		2,169	1,326	843		
2 EARNERS		845	649	196		
3 OR MORE EARNERS		192	139	53		
HEAD WORKED		2,716	1,894	822	682	883
HEAD WORKED FULL TIME		1,006	857	149		
HEAD WORKED 50-52 WEEKS		1,188	981	202	142	132
HEAD WORKED 1-49 WEEKS		1,529	913	615	540	751
HEAD DID NOT WORK		2,328	993	1,336	728	2,590
HEAD IN ARMED FORCES		29	29			
HEAD EARNED UNDER $3,000		520			ALMOST ALL BELOW $2,000 (95.2%)	
HEAD EARNED UNDER $4,000		692				
NON-FARM	23,069	4,753	2,624	2,128	4,749	
FARM	1,392	323	293	29	134	
METROPOLITAN AREAS	14,508	2,938	1,402	1,536	3,139	
INSIDE CENTRAL CITIES	9,179	1,828	742	1,086	1,977	
OUTSIDE CENTRAL CITIES	5,329	1,110	660	450	1,161	
NON-METROPOLITAN AREAS	9,952	2,137	1,515	622	1,745	
NORTHEAST	4,266	838	377	461	1,108	
NORTH CENTRAL	5,258	1,079	618	461	1,267	
WEST	4,008	843	465	379	872	
SOUTH	10,928	2,314	1,457	858	1,637	
PEOPLE OVER 65 YEARS	3,738					
PEOPLE IN FAMILIES		19,577				
RELATED CHILDREN		10,082				
OTHER FAMILY MEMBERS		4,420				

Reference 17, Tables 1,3,4,30,38

II. THE ENERGY COMPONENT IN FOOD

Reasonable estimates of the energy component of food prices may be made from existing published data, although multiple variables exist in the computations, as pointed out in the "Introduction". It should be noted that the recent rise in food costs has been the result of many other factors besides increasing energy costs: world-wide demand for (U.S.) soybeans and notably the cornering to some extent of the wheat market by the Russians which caused wheat prices to skyrocket. Market baskets differ depending on family size, composition, income and taste. For the Department of Agriculture "low-cost plan", a family of four with two school children paid an estimate of $36.70 per week in food in April of 1973, $39.90 in October, $43.70 in March of 1974 and $43.40 in April.* Recent consumer buying resistance and predictions of a record wheat crop have brought counterbalancing market forces into play.

To estimate the component of energy cost of the market basket, energy coefficients must be applied to the food items from which the above estimates are derived. Hirst's paper(3) takes appropriate 1963 input-output data for food items (the latest year for which such data are available) and projects it forward to 1970. His figures agree well with those submitted by John and Carol Steinhart.(13) Tables 3 and 4 are taken from Hirst's report. Table 3 indicates the energy consumed in 1963 by food-related activities. "Household use" which includes fuel and energy used for cooking, refrigeration, manufacture and sale of kitchen appliances and travel from home-to-market is 30 percent of the total, but is not part of the "market basket" costs above, and is treated separately herein. In Table 4, Hirst projected the primary energy use to 1970.

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*The New York Times, June 11, 1974. See Table 5 for more complete "cost-of-food-at-home" breakdown with respect to family composition.

From Table 4, primary energy use for food eaten "at home" and "on site" in 1970 was 4190 trillion BTU growing at 2.3 percent annually and 1090 trillion BTU growing at 3.1 percent annually. Extending these figures to 1973 at these rates, corresponding figures would be 4480 (79 percent) and 1195 (21 percent) trillion BTU for a total of 5675 trillion BTU. In 1963, the electrical component of energy used for food eaten at home or on site was 21 percent of the total (Table 3)* and if this percentage can be assumed accurate for 1973,** 1190 trillion BTU out of the total 5675 trillion BTU was electrical energy, leaving 4485 trillion BTU produced by fossil fuels. For 206 million Americans, per capita average consumption would be equal to 5.8 million BTU electrical and 21.6 million BTU produced by natural gas and petroleum products.***

At this point, some judgments are in order. In 1973, primary energy use of food eaten "at home" was 79 percent of the total use (at home and site) and more accurately reflects the real life condition of the poor.**** The fact that the dollar cost for the economy and low-cost plans are lower than average (naturally) has relevance to the energy budget only in that the cheaper food purchased does not happen to go through so many energy-using hands: more dry beans and flour etc., and less meat, fish or poultry.(3)* This report assumes that energy content of the poor's market basket on a per capita basis will be some 75 percent of the average (which includes "on site" consumption) and would therefore be equivalent to 4.4 million BTU electrical (400KWH) and 16.2 million BTU produced by natural gas and petroleum products.

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*905 trillion BTU out of 4251 trillion BTU.

**Probably slightly more than 21 percent.

***Coal usage by food-related activities, excluding electricity, is negligible.

****The criteria for the economy food plan, taken at 80 percent of the dollar value of the low-cost plan, is that families will buy all their food and eat all meals and snacks at home or carried from home.(29)

The electrical power usage must be divided between small and large commercial and industrial users. In 1972 average revenues for the two above users were 2.22¢/KWH and 1.09¢/KWH(30). If some favor is given to large users** in processing and commercial trade sectors, and costs extended to mid-1973, 1.50¢/KWH can be considered a reasonable weighted average. Electrical cost component in food brought home by the poor was some $6.00 per capita on an annual basis.

In 1972, average U.S.A. natural gas commercial rate was $0.91 per million BTU and the average industrial rate was $0.45 per million BTU.(24)*** Attempting to advance this to 1973 and establish some weight between them, it is estimated that cost for natural gas usage averaged $0.75 per million BTU.

Petroleum product usage favors #2 oil or diesel fuel(9) and in October 1973, the average price was about $1.15 per million BTU.****

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*See reference for energy quantities associated with different foods.

**Sales to large users were about 64 percent of total light and power used in commercial and industrial activities.

***Derived from Tables 65 and 80 of reference for natural gas sold by gas utility industries.

****The Oil and Gas Journal, October 9, 1973. About $.15 per gallon.

Attempting to bunch the fossil fuel component of the market basket, it is assumed that the ratio of natural gas usage to petroleum product usage is two-to-one,* giving an average cost of $0.90 per million BTU in 1973 on the basis of prices just before the Arab embargo. Total 1973 average annual energy cost component of food purchased retail for home consumption by the poor is then estimated at about $20.60 per capita: $6.00 for electrical energy and $14.60 for fossil fueled energy. From September of 1973 to April of 1974, wholesale energy prices paid by businesses jumped dramatically: 17 percent for electricity, nine percent for natural gas and about 168 percent for diesel or #2 oil.** Applying these values to the above thinking, electrical energy cost would be $1.75/KWH and for fossil fuels about $1.60 per million BTU. On the basis of these prices, total average annual energy cost component of food purchased retail for home consumption by the poor would be $7.00 for electrical energy and $25.90 for fossil fuels for a total fo $32.90 per capita. The $12.30 difference between the 1973 and 1974 figures probably should be slightly increased to reflect successive profit applications as the product passes up the line to the consumer. For convenience, $13.50 may represent a realistic estimate of the additional annual energy and fuel cost per capita that must be borne by the poor for the purchase of food since the embargo.

For the average family of four which paid $2,075 on an annual basis in October 1973--or $39.90 per week--for the low-cost market basket

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*Excluding usage by electric utilities. Reference 9, p. 67 shows approximately two-to-one ratio of natural gas to petroleum products for 1970 and 1971, and it should remain the same for 1973 and 1974.

**The Oil and Gas Journal, May 27, 1974, petroleum product increases vary from 72 percent for kerosene to 168 percent for fuel oil.

(Table 5), the extra $54.00 represents some 2.6 percent of the total. Since April 1974 prices ($43.40 per week) were $182 more than October 1973 on an annual basis, other significant forces are at work raising food prices.

TABLE 3

FOOD IN THE UNITED STATES - 1963

SECTOR	COST BILLIONS $	ENERGY USE TRILLION BTU	% ENERGY USE	ELECTRICITY USE BILLION KWH	ELECTRICITY USE TRILLION BTU (1)
AGRICULTURE	20.3	1093	18	19.7	216
FOOD PROCESSING (2)	35.7	2006	33	35.7	392
TRANSPORTATION	2.0	170	3	1.0	11
COMMERCIAL TRADE	29.1	982	16	26.0	286
SUB TOTAL	87.9	4251	70	82.4	905
HOUSEHOLD USE	6.1	1868	30	104.4	-
TOTAL	94.0	6119	100	186.8	-

1/ Taken at 11000 BTU input per KWH

2/ Food processing excludes input from agriculture sector.

Compiled from Reference 3

TABLE 4

FOOD-RELATED ENERGY CONSUMPTION ESTIMATES

YEAR	PRIMARY ENERGY USE (TRILLION BTU)				TOTAL PER CAPITA (MILL.BTU)	TOTAL AS % OF U.S. ENERGY USE
	FOOD EATEN:		HOUSEHOLD USE	TOTAL		
	AT HOME[1/]	ON SITE[2/]				
1960	3350	800	1660	5810	32.3	13.0
1963	3340	910	1870	6120	32.4	12.4
1965	3590	870	2090	6550	33.9	12.3
1967	3660	960	2280	6900	34.9	11.8
1970	4190	1090	2730	8010	39.3	11.9
Average annual growth rate	2.3%	3.1%	5.1%	3.3%	2.0%	

1/ Food eaten at home includes "food purchased for off-premise consumption" and "food produced and consumed on farms."

2/ Food eaten on-site includes "purchased meals and beverages" and "food furnished government and commercial employees."

Reference 3

TABLE 5

WEEKLY COST OF FOOD AT HOME[1]

(October 1973 - U.S. Average in Dollars)

SEX-AGE GROUPS [2]	COST FOR ONE WEEK		
	LOW-COST PLAN [7]	MODERATE PLAN	LIBERAL PLAN
FAMILIES	($)	($)	($)
Family of 2:			
20 to 35 years [3]...	23.80	30.40	37.00
55 to 75 years [3]....	19.50	25.50	30.20
Family of 4 [4]			
Preschool children	34.50	44.00	53.20
School children [5]	39.90	51.30	62.60
INDIVIDUALS [6]			
Children under 1 yr.	4.60	5.80	6.40
1 to 3 years......	5.90	7.40	8.90
3 to 6 years......	7.00	9.00	10.70
6 to 9 years......	8.50	10.90	13.60
Girls 9 to 12 yrs...	9.60	12.50	14.60
12 to 15 years....	10.50	13.90	16.80
15 to 20 years....	10.80	13.80	16.30
Boys 9 to 12 yrs....	9.80	12.80	15.40
12 to 15 years....	11.50	15.30	18.10
15 to 20 years....	13.30	17.00	20.40
Women 20 to 35 yrs..	10.00	12.80	15.30
35 to 55 years....	9.60	12.40	14.80
55 to 75 years....	8.10	10.70	12.60
75 yrs. & over....	7.40	9.40	11.50
Pregnent..........	11.90	15.00	17.60
Nursing...........	13.70	17.10	19.90
Men 20 to 35 yrs....	11.60	14.80	18.30
35 to 55 years....	10.70	13.80	16.70
55 to 75 years....	9.60	12.50	14.90
75 yrs. & over....	8.90	12.00	14.40

1/ These estimates were computed from quantities in food plans published in "Family Economics Review", October 1964. The costs of the food plans were first estimated by using the average price per pound of each food group paid by urban survey families at three selected income levels in 1965. These prices were adjusted to current levels by use of "Retail Food Prices by Cities" released periodically by the Bureau of Labor Statistics.

2/ Age groups include the persons of the first age listed up to but not including those of the second age listed.

3/ Ten percent added for family size adjustment

4/ Man and Woman, 20-35 years; children, 1-3 and 3-6 years.

5/ Man and Woman, 20-35; child, 6-9 and boy 9-12 years.

6/ The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person- 20 percent; 2-person add 10 percent; 3-person- add 5 percent; 5-person- subtract 5 percent; 6-or-more-person- subtract 10 percent.

7/ Economy Food Plan is 80% of the Low Cost Plan

References 23 and 31

III. ENERGY USED IN TRANSPORTATION

Public discussion has focused on the heavy burden that is borne by the poor when a vehicle must be used to perform a necessary service, primarily getting to and from work. The Nationwide Personal Transportation Study (19,20,21,22) assembled data relative to automobile usage by the public in 1969-1970. Many of its statistics specifically relate to households with incomes below $4,000. This may be acceptable for the purposes of this report as a convenient demarcation line between "poor" and "non-poor"; $4,000 income at that time would correspond to about $5,000 today(8)*, and basic driving habits up to the Arab oil embargo should not have changed that much.

At the time of the Study, there were 15.3 million households (out of a total 62.5 million) which earned $4,000 or less and 7.0 million of them owned at least one automobile (20,p.83). Total automobiles owned by this income group was 7.3 million and each vehicle was driven an average of 7,150 miles (22,p.16). There were 2.67 million worker-drivers and 1.63 million passengers going to work (Table 6), but these include trucks as the carrying vehicle.

Total vehicle miles per household in this income group was 4708 miles.(21) Each household traveled 1,458 miles per year by car on the average to earn a living. For 15.3 million households, 22.3 billion miles would have been travelled by workers on this basis.

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*Consumer Price Indices (1967=100); 1969-109.8; 1970-116.3; October 1973-136.6; April 1974-144.0

Table 7 is constructed on the basis of each vehicle being driven 7,150 miles. For the 7.3 million vehicles, 2,220 miles on the average were used earning a living for a total of 16.2 billion miles, leaving, then, about 6.1 billion miles traveled in vehicles by passengers. If the total 16.2 billion miles were assumed driven by 2.67 million worker drivers working 250 days per year, daily home-work-home mileage would have been 24.3 miles.

In its discussion of household ownership of cars and light trucks, Reference (12) puts the total U.S. household number in July 1972 at 66.5 million.* Of these, there were 20.8 million households with annual income less than $5,000, 11.1 million of which (53.4 percent) owned at least one automobile (Table 8).

Duncan (6) suggests that 3.5 percent of the total 1972 family heads use an automobile to get to and from work, and earn less than $4,500 per year (the lowest-income quintile group). This survey made no distinction between families and unrelated individuals.** 3.5 percent of the total would amount to some 2.4 million heads. The average distance traveled by these heads to and from work was about 15 miles daily. Household heads in the 1972 low-income quintile group therefore traveled about 13.4 billion miles by vehicle according to this survey.

Updating the above data, it is estimated that, today, vehicles are driven about 17.5 billion miles to take the poor, whose household annual income is less than $5,000, to and from work or otherwise related to their working activities. If the average vehicle consumption is 12 miles per gallon, total annual consumption would be some 1.46 billion gallons.

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*Reference 15 lists 54.4 million families and 16.8 unrelated individuals in 1972 for a total of 71.2 million "households".

**Personal telephone communication with the author.

Gasoline prices have climbed steeply since the Arab oil embargo. National pump prices for "regular" gas averaged some $.39 per gallon in October 1973 and $.54 per gallon in May 1974,* a jump of almost 40 percent. Total extra outlay would be some $220 million.

It appears easier to estimate this total than to apply it in some meaningful way to poor families and individuals. Using 1972 income data, the average outlay for households earning less than $5,000 (21 million) would be about $10. For those of them who own cars (11 million), the figure is about $20. For the household in which someone uses a car to get to and from work and who worked a full year (say 250 days), the extra outlay would be $47.

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*The Oil and Gas Journal, October 29, 1973; May 20, 1974.

TABLE 6

EMPLOYED PERSONS USING VEHICLE FOR HOME-TO-WORK TRANSPORTATION

(1969-1970)

ANNUAL HOUSEHOLD INCOME	WORKERS (000)	% AUTOMOBILE OR TRUCK		CALCULATED AUTOMOBILE	
		DRIVER	PASSENGER	DRIVERS (000)	PASSENGERS (000)
Less than $3000	4399	29.9	20.1	1315	885
$3000 - $3999	3974	34.1	18.8	1355	745
$4000 - $4999	3797	39.1	21.4	1485	810
$5000 - $5999	6003	51.3	18.5	3080	1110
$6000 - $7499	9638	53.3	20.8	5137	2000

Reference 20, p.65

TABLE 7

AVERAGE ANNUAL VEHICLE MILES FOR HOUSEHOLDS WITH INCOMES LESS THAN $4000 WHO OWN AUTOMOBILES

(1969-1970)

PURPOSE OF TRIP	VEHICLE MILES PER HOUSEHOLD	AVERAGE TRIP LENGTH (MILES FROM POINT OF ORIGIN TO DESTINATION)*
EARNING A LIVING	2220	8.7
FAMILY BUSINESS	1940	6.3
SOCIAL AND RECREATIONAL	2550	10.7
EDUCATIONAL, CIVIC AND RELIGIOUS	305	4.6
OTHER AND UNKNOWN	135	10.5
TOTAL	7150	8.1

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*Reference 21

TABLE 8

HOUSEHOLD CAR OWNERSHIP

(July 1972)

INCOME	NO. OF HOUSEHOLDS (MILLIONS)	OWNING 1 CAR	OWNING TWO OR OR MORE CARS	% OF TOTAL OWNING 1 OR MORE CARS
Under $3000	10.9	3.8	0.6	40.6
$3000 to $4999	9.9	5.5	1.2	68.0
$5000 to $7499	11.7	7.1	2.7	84.2
Under $4999	20.8	9.3	1.8	53.4
Under $7499	32.5	16.4	4.5	64.3

Note: Total Households - 66.5 million

Reference 12, p. 17.

IV. ENERGY CONSUMED FOR RESIDENTIAL USE

A very big impact on family income since the Arab oil embargo is the extra money which must be paid for energy consumed for residential use, mainly for home heating, although there are probably exceptions to this rule in places like Hawaii where a moderate temperature is enjoyed all year long.

The Washington Center for Metropolitan Studies conducted a survey in 1972-73 of household usage of electricity and natural gas. The poor* used an average of 174 million BTU of these energy sources; 80 percent of other households' consumption of natural gas and 56 percent of other households' consumption of electricity.(1) It is stated that about 20 percent use fuel oil for space heating. In a survey done in 1970 in Los Angeles(26), the poor averaged annually about 2,500 KWH of electricity, against an average household consumption of 4,650 KWH, almost an identical percentage as indicated above. 2,500 KWH is about 27 million BTU (input) and if this quantity is considered applicable to the 174 million BTU indicated above, it would leave 147 million BTU of natural gas consumed by the average poor family. To this should be added some quantity to compensate for those using #2 oil for heating purposes.

Natural gas is used by the vast majority of homes for most services (Table 9). If natural gas were used for space and domestic water heating, range and clothes dryer, the average household consumption in 1971 would have been about 170 million BTU (Tables 10 & 11). Assuming the poor would use less--say 80 percent--their consumption would be 135 million BTU. This would be less than that suggested by the Washington Center especially if some addition for #2 fuel oil had to be added to their number. Acknowledging that some uncertainty may exist, this report estimates that the poor's annual usage of energy in the home can be taken at 2,500 KWH for electricity and 150 million BTU for other fuels, on the average.

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*Defined as under $3,000 annual income for 1 or 2 people, under $5,000 for 3 or 4 people, under $7,000 for 5 or 6 people and under $9,000 for families of 7 or more.

In 1972, the average national residential price for natural gas was \$1.20 per million BTU(24)* and 2.29 cents per kilowatt hour for electricity.(30) Using these rates, average payment would have been \$175 for natural gas and \$57 for electricity for a total of \$232 in 1972. However, electricity and natural gas rates are based on quantity discount--the rate decreases with increased usage--and since the poor use less, they would pay a higher rate: some seven percent more according to Reference (1). Reference (1)'s survey was taken in 1973, and if the 1972 figure of \$232 were upgraded to 1973 and the additional seven percent applied, their figure of \$275 for the 1973 cost of electricity and natural gas appears reasonable, given all the variables. Accordingly, it is estimated that in 1973, the average poor household paid \$70 for electricity and \$205** for other fuels, \$165 of which would have been for space heating.

Residential electrical bills have risen across the country in the last year, but not at the same rate: from 5.3 percent in Chicago to 47.5

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*Compiled from Tables 65 and 80 of reference. Residential prices varies from \$0.93 per million BTU in the West South Central to \$2.13 per million BTU in New England.

**Slightly higher if #2 oil were used for space and domestic hot water heating at \$.20 per gallon to residential consumers.

percent in New York.* The U.S. Department of Labor suggests a 10.3 percent increase in consumer gas and electrical costs.** The rise in the poor's household energy costs as the result of last year's price increases for these households living in their own homes using natural gas for heating would average about $30 on the basis of this 10.3 percent overall increase. For those average poor households which use #2 oil for space heating--which jumped some 60 percent***--the total rise should be about $110. It might be assumed that the average impact on renters would be somewhat less than these figures.

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*U.S. News and World Report, May 13, 1974 quoting the Federal Power Commission for residences using 500 KWH per month between February 1973 and February 1974.

**U.S. News and World Report, April 15, 1974, p. 29, quoting the U.S. Department of Labor.

***Ibid.

TABLE 9

USE OF FUELS FOR HOME SERVICES - 1970
(THOUSANDS OF OCCUPIED UNITS)

	HOUSE HEATING		DOMESTIC HOT WATER		COOKING		CLOTHES DRYING	
	URBAN	RURAL	URBAN	RURAL	URBAN	RURAL	URBAN	RURAL
TOTAL OCCUPIED UNITS	47,650	15,797	47,650	15,797	47,650	15,797	47,650	15,797
UTILITY GAS	30,909	4,105	31,656	3,303	28,306	2,938	6,780	1,059
ELECTRICITY	3,401	1,475	8,649	7,454	17,394	8,374	12,770	5,866
BOTTLED GAS	920	2,887	962	2,183	1,417	3,897		
LIQUID FUEL	10,862	3,611	5,248	953	192	110		
COAL OR COKE	890	931	378	81	61	95		
WOOD	94	700	13	34	63	343		
OTHER FUEL	238	28	120	12	30	13		
NONE	336	60	624	1,777	185	28	28,099	8,872

Reference 24

TABLE 10

HOUSEHEATING LOADS - 1971

AREA	AVERAGE LOAD (MILLIONS BTU PER YEAR)	RANGES OF AVERAGE LOADS OF REPORTING COMPANIES (MILLIONS BTU PER YEAR)
UNITED STATES	119.2	20.0 - 260.0
NEW ENGLAND	146.2	90.0 - 260.0
MIDDLE ATLANTIC	131.3	92.2 - 225.0
EAST NORTH CENTRAL	153.9	109.0 - 206.0
WEST NORTH CENTRAL	117.8	103.0 - 240.0
SOUTH ATLANTIC	102.2	20.0 - 150.0
EAST SOUTH CENTRAL	86.5	50.0 - 135.0
WEST SOUTH CENTRAL	66.0	50.0 - 150.0
MOUNTAIN	107.9	51.6 - 160.0
PACIFIC	84.1	47.5 - 145.0

Note: Computed from actual househeating load studies and load estimates of 74 companies located across the United States during 1971.

Reference 25

TABLE 11

1971 USE OF GAS BY RESIDENTIAL APPLIANCES (MILLION BTU PER YEAR)

HOUSE RANGE	10.5
APT. RANGE	8.8
WATER HEATER	31.6
CLOTHES DRYER GAS PILOT	7.5
CLOTHES DRYER EL. PILOT	6.0
INCINERATOR	13.0
GAS LIGHT	18.1
GAS HEATING (ALL TYPES)	119.2

From a Survey of 23.5 million out of 39.2 million gas-using residential customers.

Reference 25.

V. THE ENERGY COMPONENT OF MANUFACTURED PRODUCTS

There is an energy component to every manufactured product purchased by an individual: that required for production, processing, distribution and sale. 1972 industrial fuel value is as follows:

1972 INDUSTRIAL FUEL VALUE BREAKDOWN(19&24)

($ Billions)

TO INDUSTRY(EXCLUDING EL.UTIL.)

Gas:	8.2 TCF	@ 0.45/1000 CF	$3.70
Dist.Oil:	60×10^6 bbl	@ $11/bbl	0.70
Resid.Oil:	146×10^6 bbl	@ $ 4/bbl	0.60
Coal:	175×10^6	@ $10/ton (est)	1.75
			$6.75

The industrial usage of electricity in 1972 was 639 billion KWH out of 1577 billion KWH, returning about $6.2 billion out of $28 billion total revenue.(30) The total industry energy component to GNP is then about $13 billion (6.8 + 6.2). This produced goods (durable and non-durable, less food, gasoline and oil, which are examined herein separately) of about $365 billion value and probably structures of $126 billion for a total of some $500 billion.(15) Energy component is some 2 1/2 percent. 1960-61 expenditures for current consumption excluding food and direct purchases of fuels may be considered about 40 percent of income(33), and if this can be extended to today, the consumer cost of the energy component of manufactured goods is about one percent of income.

As in the discussion of energy cost component in food, the expenditures by industry for energy and fuel are mainly for electricity and natural gas, and the rise in their rates since last year are about 17 percent and nine percent respectively. For the fuel oil that industry does use--about half that of natural gas--prices rose 168 percent. An increase of 40 percent is then estimated for the additional energy costs to produce goods as may be purchased by the poor* or 0.40 percent of their income: something between $10 and $20 per household for those earning less than $5,000 annually.

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*These goods include equipment reflected in the food market basket already calculated herein. The amount that should be subtracted is ignored.

VI. POLICIES TO RELIEVE THE POOR

FOOD:

This paper estimates an increase in food costs due to higher fuel and energy prices at $13.50 per person annually. In 1972, there were 24.5 million people below the poverty line, 10 million of which were related children (Tables 1 and 2). If these people are identified as those to be served by some governmental program, the increased increment would be $330 million.[*] If $5,000 (1972) is taken to be a more realistic demarcation line, there are 26.7 million people in families and 10.5 million unrelated individuals who make less than this amount(2). The program cost would climb to $500 million if all of them were to be served.

To offset rising food costs--and the rising cost of energy is but one component of the recent increases--increased consideration through existing food relief plans is all that is required. This has already taken place in the Food Stamp Plan in conformance to established formulae. However, the Food Stamp program is expanding to such a degree that Federal officials are becoming apprehensive over possible scandals arising from mismanagement,[**] such as the distribution of food stamps to college students from affluent families who claim to be on their own with little or no income. Cost for this program is now estimated to reach some $5.9 billion; it was $1.6 billion as recently as 1971.[***] In fact the program may pass from the Agricultural Department to H.E.W. The outstanding requirement of this program is to make sure eligibility requirements are observed so that only those who are entitled to consideration may be served.

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[*] Variations in consumption due to age are ignored. Lower than average consumption for children and those over 65 will almost be matched by the higher than average consumption of the others.

[**] U.S. News and World Report, June 24, 1974, p. 3.

[***] U.S. News and World Report, July 22, 1974.

TRANSPORTATION:

It is estimated herein that the poor--defined as those families and individuals with income less than $5,000 (as far as the transportation discussion is concerned)--traveled some 17.5 billion vehicle miles to earn a living. Since the embargo, an additional $220 million must be paid due to increased fuel costs. There is no program like the Food Stamp Program established for vital transportation fuels, but if the government wanted to inaugurate one to compensate the poor, at least for the work-oriented fuel increases, it does not appear that the outlay would be prohibitive. If the program were to be financed by a tax on total gasoline sales--about 100 billion gallons--it would amount to some 2.2 mills per gallon which leads one to believe even greater consideration could be given the poor besides work-related fuel without severe burden to the total driving population. The established automobile registration and welfare indentification systems may serve well to verify legitimate recipients and hold down the number of would-be cheaters.

HOUSEHOLD FUEL AND ENERGY:

This report indicates that for those homes using natural gas for space heating, the additional annual costs to the poor for fuels and electricity for an average household is some $30; for those using #2 oil for heating, the increase is more like $110.* Total impact on the poor

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*From Table 9, about 55 percent of total households use natural gas for space heating.

(below $5,000 annual income) should be between $600 million and $1 billion. Renters are likely to be affected less than home owners.

The impact of recent increases in electrical and natural gas costs could be significantly reduced--perhaps to zero--if the "energy ethic" could be applied to the present institutional method of establishing quantity discount rates; that is, by freezing the lower usage rates at their present levels and applying the increases to the higher usage rates, which would be borne more by the affluent than the poor. The apparent inequity of this present pricing policy has been discussed and condemned by so many people that there is likely some validity to the thinking. This approach not only appears to have moral merit, but eliminates direct intervention by the government with yet another relief program with all the bureaucratic and statistic-gathering problems that go with it. Such an approach should cover a significant part of the rising energy cost burden on the poor.

It has also been suggested that the rise in natural gas and electrical costs be assumed more by industry than by residential users. In 1972, the average electrical rate for large light and power industrial users was 1.09 cents per KWH as compared to 2.29 cents for residential users.(30) For natural gas, it was 45 cents per million BTU (or lower) compared to the average residential rate of $1.20 per million BTU.(24)* A combination of both of the above strategies may be an "ethical" way to relieve the poor of their electrical and natural gas cost increases. However, since these institutional procedures are well established, they will be difficult to change. Of course, the quantity discount method is not used for #2 oil or other fuels used for space heating--at least not in the quantities purchased by the average family. While there are some established welfare programs which pay part or all of the recipients fuel and electricity bill, another relief program would have to be established to offset rising home fuel and energy costs for those not so covered.

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*Tables 65 and 80 in Reference 24.

There has been much discussion regarding the initiation of programs to insulate existing homes or install storm windows and doors in those which do not have them. These would be, of course, good energy conserving approaches which would, in fact, tend to increase the quality of life of the homeowner. However, there are some facts which should be reviewed before blanket endorsement can be given.

Almost 70 percent of all poor households have no storm windows or doors and of those living in single family houses, more than half have no insulation.(1) Variables which will affect the quantity of heat required to maintain comfortable conditions inside a residence are:

1. The difference between the inside and outside temperature
2. The characteristics of the residence
3. Outside wind conditions
4. Efficiency of the heating equipment

The difference between inside and outside temperatures over an average heating season has been calculated for all areas of the United States and is represented in "degree-days". The number of "degree-days" in any yearly heating season establishes the duration of time in days of the average difference between the colder outside temperature and a temperature of 68°F maintained inside a house. Of course, most people prefer 74°F for an inside temperature, and correction should be made if this value is selected as the preferred design. As might be imagined, houses further south will be located in areas of lesser "degree-days".

The characteristics of the house to be considered in a heating calculation refer to the area and heat transferability for all of the surfaces that stand between the inside and colder outside, and the ability of windows and doors to prevent cold air infiltrating around their cracks. The heating transferability, or "U" factor, of material used in construction is expressed in BTU/hour/°F/square foot of surface area. Table 12 shows "U" factors for various constructions. Heavy insulation has the effect of allowing the disregard of the contributions of all other materials; it can be seen that 3" of insulation will produce essentially the same "U" factor irrespective of construction and will reduce heat transmission by a factor of about 4. Transmission of heat through single pane windows is three to four times worse than any uninsulated wall; double panes transmit heat ten times the rate of an equivalent size wall with 3" insulation.

Infiltration of cold air into a house is a function of the outdoor wind velocity and the "tightness" of the doors and windows. To calculate room heat losses, the wind velocity is assumed to be 15 mph.

Table 13 shows characteristic air leakage values for different types of windows and doors. Weatherstripping or storm windows are estimated to cut infiltration in half.* It should be recognized that some excellent windows will have better (lower) infiltration characteristics, as will some types of storm windows, and it is advisable to consult with window and door manufacturers on leakage that might be expected. Polyethylene, or any flexible plastic for that matter, can reduce infiltration to near zero if securely taped over the window. Of course, people have used clothing, paper or anything else that will stuff into door and window cracks.

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*Reference 1 attempts to calculate the economies of installing storm windows based on reduced transmission alone, completely ignoring infiltration. The significance of the word "storm"--that is protection against wind and weather--seemed to have been lost.

To get a feel for the method of calculation, an example will be taken. Let us assume a family lives in a one-story frame house built on slab with overall dimensions of 20' x 40' (800 sq. feet), with 8' room height, no wall insulation, 3" roof insulation, no storm windows. The house has six 2' x 4' double hung wood windows and two 3' x 7' doors. Since the wind can only blow in one direction at any one time, we assume half the windows and only one door are subjected to infiltration. The house is located in an area where the climatic conditions are such to produce 6000 degree days as the wintertime heating criteria.

TRANSMISSION LOSSES*

	Area	Factor	BTU/Hr/°F
Windows	6 @ 2' x 4'	1.13	54
Doors	2 @ 3' x 7'	0.48	20
Walls	8' (20+40+20+40) less windows and doors	0.35	305
Roof	20' x 40'	0.07	56
		TOTAL	435

INFILTRATION LOSSES

	Area Factor		BTU/Hr/°F
Windows	3 @ 16 ft. of crack x 1.08		52
Doors	1 @ 20 ft. of crack x 2.16		42
		TOTAL	94

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*Losses through floor slab are small and will be ignored.

The sum of these two factors (435 + 94) multiplied by the design difference in temperature between indoor and outdoors will give the instantaneous maximum heat requirement for the residence. For the calculation of the total heating loss for an entire winter season, the "degree-day" method can be reliably used in the case of transmission losses. The method is less perfect when applied to infiltration losses since average wind velocity over the entire season impinging on the glass area of a home or apartment varies with orientation, protection from trees or bushes, etc.. For the fuel requirements for this example, it is assumed that 100% of the "degree-day" calculation is correct.

Total seasonal heating loss is calculated as:

Transmission: 435 BTU/HR/$^{\circ}$F x 24 hours/day x 6000 degree days=63 x 10^6BTU
Infiltration: 94 BTU/HR/$^{\circ}$F x 24 hours/day x 6000 degree days=14 x 10^6BTU
Total seasonal loss=77 x 10^6BTU

If this residence were heated by a central system fired by #2 oil or natural gas, efficiency would be about 65 percent. If heated by electrical resistance heaters, efficiency would be near 100 percent. Prices for these different sources of heat vary. To complete this exercise, let us assume that the residence is heated by natural gas at an average price of $2.00 per million BTU from a central system. Cost to the resident would then be $230 per heating season.*

Economic justification for wall insulation or storm windows and doors may now be made. Insulating the walls with three inches of insulation--essentially filling the space between the studs--would reduce the yearly wall transmission loss some 35 million BTU and save about $100 per year in this example. For new houses, where access to the studs may be made before the interior finish is applied, wall insulation almost always makes sense.* However, for an existing residence--more likely to be occupied by a poor family--that has a finished interior, either the interior or exterior surfaces must be cut to install the insulation. The more economical insulation for this type of condition is one that can be blown into the space between the studs--such as rockwool--and the cut surfaces refinished. This is a job for professionals; if the total cost for this example exceeded about $950, the house assumed to last 20 years more and interest on money at 10 percent, it would be uneconomical to do it unless fuel costs were higher than shown here. Further, many of the poor are elderly, and while the house may be expected to last 20 years longer, they may not. If elderly poor live in this residence, they may be correct not to invest in insulation.

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*If this residence were heated by electricity at an average cost of 1.5 cents per kilowatt hour, ($4.50/$10^6$BTU) cost would be $350.

Installation of a storm window over an existing window will cut both transmission and infiltration, but the installation would most likely have to be done by professionals also. In this example, if storm windows and doors were installed, some eleven million BTU and $33 would be saved annually. Breakeven capital cost would be about $320; probably not enough money for eight windows and two doors** unless installed by the homeowner himself.

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*Insulation itself is cheap; labor is expensive, but installation can be done rapidly in a new house.

**In tradeoff calculations regarding storm windows and doors, those openings facing north and west receive priority, and judgment would indicate whether these alone would need storm sash.

It would appear that installation of storm windows and doors may be economically unjustifiable. Why then do people want them? If windows do not really close tightly, the cold air infiltration can temporarily overpower the heating system when the outdoor temperature is very low and there is a really strong wind outside (40-50 mph). Depending upon a variety of factors, storm window and door installation may not be economically justifiable, but may be bought anyway to prevent temporary inconveniences* or discomfort. The poor will likely not be able to enjoy such an approach. However, polyethylene or other transparent plastic may be taped over the existing windows by the occupant, even on the inside face of the glass if getting to the outside is dangerous or unpreferable. While not very pretty, plastic works wonderfully well provided it is purchased in adequate thickness that will not tear while serving its function, and if it is taped on well. Furthermore, it is very cheap, and annual renewal is usually not a heavy burden. Doors, of course, cannot usually be handled this way. If a storm door cannot be afforded, infiltration is best handled by weatherstripping. The poor (and the well-to-do for that matter) can also throw a rug or a coat against the lower edge of the door on those days when a cold wind is blowing at high velocity. This last should not be a basis for making decisions, but it is nevertheless a practical thing to do..

The poor are not likely to be purchasing new housing. If they are living in their own private residence which does not have insulation, an economic analysis must be made to justify the installation. If access is readily available to the attic or roof studs, installation is easy, and it usually pays to put insulation in. For finished exterior walls, the calculation should include whatever cutting and patching of surfaces must be done.

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*A storm window will also help prevent condensation and freezing of water vapor on the interior glass surfaces of a single pane window.

Installation of insulation and storm windows and doors may save energy and add to personal comfort. It may not save money. Rising fuel costs favor installation; rising interest rates do not.

TABLE 12

"U" VALUES - TRANSMISSION

ITEM	BTU/HR/FT^2/°F
FINISHED WALLS, FRAME EXTERIOR (NO INSULATION)	0.35 - 0.25
FINISHED WALLS, FRAME EXTERIOR (1" INSULATION)	0.15 - 0.13
FINISHED WALLS, FRAME EXTERIOR (3" INSULATION)	0.07 - 0.06
FINISHED WALLS, MASONRY EXTERIOR (NO INSULATION)	0.30 - 0.20
FINISHED WALLS, MASONRY EXTERIOR (1" INSULATION)	0.20 - 0.15
FINISHED WALLS, MASONRY EXTERIOR (3" INSULATION)	0.07 - 0.06
PITCHED ROOFS - NO INSULATION	0.30
PITCHED ROOFS - 3" INSULATION	0.07
SINGLE PANE GLASS	1.13
DOUBLE PANE GLASS	0.61
TRIPLE PANE GLASS	0.45
WOOD DOOR	0.48
WOOD DOOR WITH STORM DOOR	0.31

Reference 32

TABLE 13

INFILTRATION LOSSES

(15 MPH Outside Wind)

ITEM	CFM/FT OF CRACK	BTU/HR/°F/FT OF CRACK
DOUBLE HUNG WOOD WINDOWS	1.00	1.08
DOUBLE HUNG STEEL WINDOWS	1.20	1.30
STEEL CASEMENT WINDOW (1/64" CRACK)	0.05	0.54
INDUSTRIAL PIVOTED STEEL WINDOW (1/32 " CRACK)	1.50	1.62
ARCH. PROJECTED STEEL WINDOW (1/64" CRACK)	1.00	1.08
WOOD DOOR	2.00	2.16

FOR WEATHERSTRIPPING OR STORM WINDOW (DOOR) ADDITIONS, USE 1/2 OF THE ABOVE VALUES

NOTE: 1 CFM x 0.075 #/FT^3 (DENSITY) x 0.24 BTU/$^{\#}$/°F (SPECIFIC HEAT) x 60 MIN/HR = 1.08 BTU/HR/°F

Reference 32

MANUFACTURED PRODUCTS:

The low-energy cost component of the price for manufactured products bought by the poor--say $15 per average household per year--puts the total dollar amount at something between $150 and $300 million depending on how the poor are to be identified. This amount does not appear so large as to cause concern if existing programs serving the poor were increased to cover it.

SUMMARY:

While there are a myriad of statistics available, there is still insufficient data to do anything but make reasonable guesses regarding the total impact of fuel costs on "the poor". Usage by families and unrelated individuals whether renters or home owners should be more clearly identified with respect to income.

The spread between costs for natural gas and #2 oil when used for residential space and water heating is too large today to conveniently group in the attempt to get a reasonable overall estimate of costs that might be paid by low-income groups for these purposes. Last winter was generally mild and the full impact of the higher prices was mitigated by this fact. If the winter of 1974-75 is severe, one may expect a good deal of newspaper space to be devoted to the subject. As mentioned herein, a portion of this burden may already be assumed by some existing welfare program, but for those poor not so covered or for those whose income just puts them out of the programs' range, the effects of the higher prices will be heavily felt.

Taking into account all of the caveats expressed herein, for a poor family of four paying for utilities in their own home, one member of which works all year and uses a car daily travelling 15 miles to and from work, the recent increased annual costs for fuel and energy are summarized as follows:

Food Purchases	$ 54
Work-oriented Transportation..........	$ 47
Home Utilities-Natural Gas Heating....	$ 30
Home Utilities-#2 Heating Oil.........	$110
Manufactured Products Purchases.......	$ 15

for a total of $146 if their house is heated by natural gas and $226 if it is heated by #2 oil.

VII. LONG-TERM BENEFICIAL ASPECTS OF THE ENERGY CRISIS

The Arab oil embargo has caused us to reexamine our national energy policies. On November 7, 1973, the President called for independence from foreign energy supplies ("Project Independence-1980"). While there is much debate today regarding the extent to which our self-sufficiency should be carried, there is no doubt that the production and usage of coal will be greatly expanded. Some projections stressing coal usage call for the doubling of the present-day production by 1980 and tripling by 1985 (10)

Coal is now mined by some 150,000 people. As might be imagined, great emphasis is being placed on increasing output per man through advanced underground mining technology and through the expansion of surface mines which are less labor intensive than those underground. Nevertheless, doubling production should increase labor requirements by about 100,000 people and tripling it, by some 150-175,000. Mining activity should pick up in some areas such as Appalachia which have recently been depressed, and the number of the "poor" now located in those areas may be expected to be reduced. Further, total employment requirements should absorb others willing to relocate and who are ready, willing and able to work. Miners are paid well today; $42-50 per day plus benefits.

Coal-processing plants and the transportation of coal by barge and railroad will also require increased manpower. Maintaining track bed in particular is highly labor intensive(11) and job opportunities for unskilled and semi-skilled labor will increase. An interesting observation(11) is that the main traffic arteries will go through or near such poverty areas as Philadelphia, Newark, New York, Washington, Baltimore, Cleveland, Chicago and Detroit. Crew recruitment has historically been from the low-skilled unemployed in the cities.

Hopper cars to carry the coal will have to be fabricated and maintained. Coal-burning electric plants will require more manpower than their oil, gas and nuclear counterparts. Proposed coal gasification and liquefaction plants will have high manpower requirements for construction and operation. It would not be surprising if over 500,000 new job openings for unskilled or semi-skilled workers became available by 1985 that were directly associated with the production, transportation and use of coal.

In general, the impact of the energy crisis will afford the long-term opportunity to substantially reduce the numbers of the poor. In the attempt to become relatively "independent" from foreign suppliers and influence, the concentration within our borders of energy-related facilities using all types of fuels will increase. To the manpower discussed above in the coal-associated enterprises must be added those in the oil, gas, and nuclear businesses, and the industries, such as steel, which must serve them. Increased drilling, welding, shipping and refining will have a multitude of low-skilled job requirements. Again, emphasis must be placed on the readiness, willingness and ability of the low-income earners to relocate and to work.

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ENERGY

"The Effects of the Energy Crisis on the Poor--the Bright Side"

by

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THE EFFECTS OF THE ENERGY CRISIS ON THE POOR--THE BRIGHT SIDE

In recent weeks a number of discussions, not just at Hudson Institute, have considered the negative effects of the energy crisis on the poor.* While these are indeed important, since the rising cost of living will certainly hit the person with the smallest income the hardest, there is another side to the energy crisis which should be examined.

Actually the crisis we are experiencing is due to a lack of liquid fossil fuels and to some extent gaseous fossil fuels, and not to a lack of energy reserves per se. The obvious solution recommended by the President and others is to shift to a type of energy which we have in abundance, that is, coal. Such a shift would substantially increase labor requirements. Overall, the coal extraction and processing industry is much more labor intensive than is the liquid and gaseous fossil fuel extraction and processing industry.

The transportation of solid fossil fuel requires an effort which is orders of magnitude more labor intensive than the pipeline transportation of liquid or gaseous fuels. Furthermore, the type of jobs created in the extraction, processing and transportation of coal are likely to have more jobs with lesser requirements for education and high technical ability than the processes connected with the other types of fuels.

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*E.g., at a meeting on the energy crisis in Harlem, Negro political leaders asserted that "black and poor communities...were more severely hurt than the community at large." The New York Times, February 22, 1974, p. 12.

The extraction of coal (mining) is orders of magnitude more labor intensive than the extraction of oil by automatic pumps. Even strip mining with its huge drag lines working from the surface to remove coal from shallow veins is far more labor intensive. The operation of an automatic miner in underground mining and of a drag line, along with many other jobs connected with mining, calls for a considerable degree of skill. But there is still a large requirement underground for men to work with scoop shovels and other simple equipment to assist operators of automatic miners, to keep the intersections of conveyor belts clear, to help load and trim cars for movement of coal underground, etc. Above ground there are still some less technical tasks connected with strip mining operations, currently including the straight ground-moving and trimming work involved in replacing top soil after the stripping. Even processing plants for coal, although automated, are much more labor intensive than the almost completely automated huge refineries that process liquid fossil fuel; and of course the little processing required of natural gas takes almost no manpower.

In the transportation of coal, in the amounts now being discussed, many jobs are automatically generated simply because of the requirement to upgrade and maintain at a high level, under much heavier traffic, the railroads moving coal to market. These heavy coal trains with 130-ton gross weight hopper cars require a well-maintained roadbed, particularly for relatively high-speed traffic, or the lines will simply disintegrate under the pounding. Because the railroads have allowed their lines to deteriorate so much in the past two decades, large amounts of money and effort will have to be invested in restoring these lines if coal traffic increases significantly. Furthermore, coal traffic generates maintenance requirements above and beyond that generated solely by the movement of other heavy trains over the rails. Hopper cars continually sift fine coal dust onto the roadbed as the trains rumble along. This dust is carried down into the ballast by the rains and tends to form "mud" in and under the ballast, which softens the roadbed. The only prevention is to continually clean the ballast, which requires crews equipped with automatic ballast cleaners (shimmy shakers). Nonetheless, these operations are extremely labor intensive compared to the maintenance operations on an oil or gas line. Such ballast cleaning crews require men not only to run the equipment but to trim and do other less highly-skilled jobs. The real manpower, however, is still required in track and roadbed maintenance because of heavy tonnage movement. While automatic tie tampers and other equipment reduce manpower needs, a crew replacing ties or rail or reballasting has a large number or laborers, many of them only semi-skilled. Compared to other industries involved in energy supply, there are an extraordinary number of jobs in extraction, processing and transportation of coal which a semi-literate man willing to work can hold. Furthermore, for those who are qualified, advancement to machine operator or even foreman or supervisor is possible. At the very least, the coal, railroad and other transportation industries should provide opportunities for some unskilled people to learn about holding a job, joining a union, getting a social security number, pensions, F.I.C.A., etc., as well as providing possible important "social" benefits--the experience of working with people doing something that needs to be done, belonging to a group, crew, or gang (a legitimate gang).

This whole new emphasis on these relatively depressed industries could have a particularly salutary effect on the poor because of the geographic location of the new job opportunities. Obviously Appalachia, extending from Pennsylvania through northern Georgia, which has been one of our worst areas of chronic unemployment, would experience a large increase in job opportunities because of its vast coal fields. But primarily due to manpower required to transport coal, job opportunities for the unskilled, semi-skilled and skilled workers would extend to many other areas. Some of the skilled and unskilled work would be associated with an increased requirement for hopper cars on the railroads, very crude vehicles needing a higher percentage (compared to trucks) of unskilled to skilled labor in their production. There is a requirement for welders, but also a requirement for people handling sheet steel in yards and working with chain hoists moving everything from end sils to side braces around in the plant. Of course the largest amount of unskilled and semi-skilled labor would be required by the railroads themselves, not only doing the work along the right of way described earlier, but maintaining the cars and building large numbers of them in their own shops.

It is interesting to note where these main arteries of coal transport are likely to fall. Obviously they move from the coal fields to the large demand areas on the east coast and the industrial cities in the mid-west. This would mean much work availability on the railroads going through such poverty pockets as Philadelphia, Newark, New York City, Washington, D.C., Baltimore, Cleveland, Chicago and Detroit. These job requirements are particularly interesting because crews that work on these railroads usually live in bunk cars out along the line and are recruited from the nearest heavily populated areas. I can recall as a young man railroads recruiting such crews from the low-skilled unemployed of the Bowery in New York City, and loading them aboard trains, to be taken into the hinterland to work in section gangs on the railroad. There is no reason the same process could not be used today. Furthermore, these job opportunities could be posted in every welfare office. These men would actually be employed by railroads headquartered in major cities, but would be sent out to work on division areas both near and distant. They would work five days out on the road and come home weekends. There is another advantage to handling labor this way. In areas where large numbers of men might raise objections from local officials, the railroad can spot the bunk cars on a siding out on the line, away from small towns. (These crews are usually hauled to and from the actual points of work on the track by motor cars or work trains.) All in all, it is not that bad an environment, especially for younger men with no skills and a poor education, who otherwise would be roaming our core-city streets with no hope of employment.

This increase in transport would also create many jobs in the large railroad terminals and railroad equipment and mine machinery plants, which are located in our larger cities where people can find jobs within commuting range of their homes. There will also be manpower requirements to handle the coal at burning sites that presently do not exist for fuel now consumed. Power plants and other industrial and commercial units using coal require storage yards in the areas of large population, with men to move coal around and keep the conveyor belts filled, and to remove the ash and maintain the equipment used in these jobs. Here again, a great deal of this work will require much less skill than the few jobs now associated with using oil and natural gas in industrial plants.

To repeat, this shift to coal due to the energy crisis should provide large numbers of jobs for the unskilled and semi-skilled that were previously unavailable, and many of these jobs should open in the very areas and pockets of poverty that are the points of greatest concern. It is difficult to estimate how many such jobs will be created, but if the President continues to pursue his expressed goal of self-sufficiency in energy supply, mining and transportation of many hundreds of millions tons of coal a year for a prolonged period of time may be necessary. As stated earlier, such a requirement not only calls for a large increase in labor in the mines, but the digging of new ones and even the building of new railroads,* to say nothing of the spectacular requirement for the upgrading and maintenance of existing railroads. Today the coal mines of the United States employ about 140,000 men. In 1950 they employed almost 500,000. This is clearly the effect of automation and strip mining compared to deep mining, for coal production today is approximately the same as it was in 1950. But if that coal production is to be doubled, tripled, or quadrupled, as some estimates indicate, it is quite likely that the mining industry is again going to require several hundred thousand men to meet the demands for coal. On railroads between 1950 and today, the number of employees dropped from over 1.2 million to about half a million. This drop reflects the impact of automation and deferred maintenance, because the actual amount of intercity freight traffic hauled by the railroads in this time period increased from 628 billion ton-miles to about 750 billion ton-miles. Here again, if the railroads are to meet the great increase in traffic visualized through this shift to coal, regardless of automation, they will have to hire many thousands of men to bring their capability up to a point where they can meet this new traffic demand. To repeat, in both industries, as well as in industries that will use the coal, much of the new labor requirement can be met by unskilled or semi-skilled workers. This is good news to accompany the bad news for the poor resulting from the energy crisis.

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*U.S. Steel Corporation recently signed a 30-year contract with the Hydroelectric Power Commission of Ontario for 90 million tons of coal to be produced from a new mine in Pennsylvania. The delivery of this coal will require the building of a 17-mile railroad to connect the mine with Monongohela River, where the coal will be transported by barge and rail to a Lake Erie Port for water transport to Ontario Hydro.